JUNIOR-SENIOR HIGH SCHOOL CLEARING HOUSE

VOLUME IV FEBRUARY, 1930 NUMBER 6

EDITORIAL

In more than one of the articles that make up the contents of the present issue of the JUNIOR-SENIOR HIGH SCHOOL CLEARING HOUSE the reader will find emphasis laid upon pupil-teacher partnership, upon the desirability in the classroom of genuine, sincere coöperation between pupil and teacher, as well as among pupils themselves. If there is a single underlying principle by which the progressive teacher can be guided in his efforts to direct his pupils in the formation of good habits and attitudes, it is perhaps this fundamentally important condition of partnership, with all that it implies.

All that it implies, however, is so much and so diversified that the teacher who whole-heartedly tries to set up the coöperative atmosphere in his classroom is in danger of finding himself hampered in several ways—by curriculum requirements, for example; by lack of administrative sympathy; by the failure of parents and supervisors to understand and aid. For coöperation means sharing in the responsibility of choosing what shall be done, as well as in the responsibility of doing it; provision for individual differences among children means more than making it possible for each pupil to learn at his own best rate; it may mean also making it possible for some to learn different things from others. And if this latter possibility is put into practice, what becomes of regents' syllabi, final examinations, grounds for promotion?

Dr. E. K. Wickman, in his intensely interesting study, *Children's Behavior and Teachers' Attitudes*,[1] expresses the opinion that the stress laid on school accomplishment is the chief reason why teachers hold towards the behavior problems of children an attitude different from the prevailing one. This seems to the writer to lead to the inference that if teachers could be freed from the necessity of being rated according to the proportion of their pupils who pass final examinations, they would be found to accept just about the same scale of values as that of intelligent people generally. Desirable traits of character, good habits, ideals, and interests would beyond question play a larger part in their rating of pupils than numerical grades obtained by the successful memorization of subject matter assigned to be learned.

In brief, the coöperative attitude between pupils and teacher involves coöperation between teacher and supervisor, between teacher and principal, and ultimately between teacher and those more remote authorities, the city or State administrators. What is needed is a large-scale reorganization of our attitude towards young learners

[1] Reviewed in this issue.

—a change that may occasionally involve recognition of their ability and their right to raise questions not specifically listed in the syllabus, and even to answer such questions out of their own thinking rather than through the memorization of the stereotypes of past generations.

It is refreshing to realize that this kind of reorganization is now going on in such institutions as Mr. Maguire's junior high school and in the college of which Dr. Holt is president. From such sources as these, more liberal and adequate ways of guiding the activities of young people are going to spread until the inadequate and wasteful phases of our current school practice are eliminated. A. D. W.

CLASSROOM PROCEDURES AND THE OBJECTIVES OF EDUCATION

"Along the Paris streets, the death-carts rumble, hollow and harsh. Six tumbrils carry the day's wine to La Guillotine. All the devouring and insatiate Monsters imagined, since imagination could record itself, are used in the one realisation—Guillotine. And yet there is not in France, with its rich variety of soil and climate, a blade, a leaf, a root, a sprig, a peppercorn, which will grow to maturity under conditions more certain than those that have produced this horror. Crush humanity out of shape once more, under similar hammers, and it will twist itself into the same tortured forms. Sow the same seed of rapacious license and oppression over again, and it will surely yield the same fruit according to its kind."[2]

The objectives of education are never abstract. It is not health in general, or social efficiency in general, or leisure in general that should control educative practices. It is John Jones's and Mary Smith's personal traits and life needs which must govern their school-directed activities.

No matter what other considerations might seem to justify policies or methods, any practice is futile, perhaps vicious, which does not directly benefit each pupil assigned by society to the school. Against prescriptions and requirements which make no appeal to them, pupils enter effective, though often silent protests. They daydream, they neglect home preparations; they leave school. It profits little that the practices of schools and teachers are calculated to achieve objectives, if pupils do not in fact respond with reasonable enthusiasm to curriculum and methods.

Shortsighted and fatuous is the attitude of very many academic high-school teachers. They are employed solely because American society desires and demands high-school opportunities for all of its children. If these great numbers did not attend high school and if the communities did not favor their attendance, buildings and positions and salaries would not be provided. And yet, how frequently do high-school teachers deny encouragement and success to the great numbers of youth who make the employment of the high-school teachers possible! "There is more weeping over one girl who fails of entrance to college than over ninety-and-nine who quit and go to work," asserts Runnels.

Just recently a committee of high-school teachers of New York City found that *thirty-seven per cent* of fourth-semester pupils of New York City high schools are failing! And conditions in the other semesters are only a little less "horrific." The committee has recommended more vocational and technical schools and courses. Surely, adolescent boys and girls should be able to get trade training if they wish it. Doubtless New York City should provide such opportunities far more generously than it does. But such a plausible suggestion entirely disregards New York City experience. For both parents and children want general high-school membership or nothing.

[2] Charles Dickens, *Tale of Two Cities*.

Mistaken such parents and children very likely may be. But general high schools are faced by a serious condition characterized by unhappy and thwarted youths and parents. They complain about homework. They charge that teachers are partial, that they have unpleasant dispositions, that their discipline is ineffective, that their explanations are not clear, that they lack knowledge, that they lack humor, that their assignments are indefinite, that they talk too much, that they nag pupils. These and many other criticisms were cited by pupils in response to the question "What qualities, in your judgment, make a teacher poor?" posed by Superintendent Light of Barberton, Ohio.

Note the frequency of typical defense reactions. Here are the responses of inferiority complexes, discouragement, distortion. The community employs us and builds and equips school buildings in the faith that youth may find more abundant life! God forgive us for we know not what we do.

We are mad with the delusion that more learning will make boys and girls educated. If we pretend to think at all, we merely rationalize or express our faith in some occult process by which paradigms, theorems, dates, verbal explanations, and grammar will benefit health and homes and foster good will.

Truly, our academic high schools with their home study, their abstractions, their false values are for great numbers of children monstrous engines which distort and crush and ruin. It is not "rapacious license," however, but ignorance and inertia and stupidity and cowardice that lie behind the failure of the public high school. But the outcome is no less serious even if the symptoms are less explosive and dramatic than was the terror of the French Revolution. And most academic high-school people are as unaware of the volcano on which they tread as was the aristocrat of the *ancien régime*.

Before one State legislature in 1928-1929 were three lobbies attempting to affect proposed educative legislation. The labor lobby and the manufacturers' lobby united to press for higher age for compulsory schooling, for the preservation of the compulsory continuation school, and for an increase in the minimum grades to be completed before a pupil could leave school. And the lobby representing the schoolmasters not only fought this educational legislation but even urged that the compulsory continuation school be discontinued.

It is almost unbelievable! High-school progress has been forced on us. We have not sought it. We do not generally understand it. We give inch by inch, still clinging to our absurd formulas. "I am coming more and more to think that our craze for secondary education is a dangerous blunder," said G. Bernard Shaw recently. "It seems to me to produce imbecility, which is just what might be expected from a system which begins by assuming that every boy can be an Einstein if he is not allowed to be lazy, and that you can imprison children and hold them to tasks beyond their capacity and foreign to their aptitude all through their growing years without damaging them."

In California, the part-time (continuation) schools will provide three hours of schooling a day for all youths between sixteen and eighteen who have left the regular schools and who are not employed. This is education's greatest leap in the dark. Thousands of boys and girls who hate day school, discouraged, broken on the wheel of academic education, will be compelled by law to attend part-time school three hours a day. What an overwhelming task! What a most glorious opportunity! Success to the California part-time schools in this greatest of educational adventures!

If they are to succeed, however, if any of us is to succeed, a revolutionary change in the spirit which underlies all methods and

practices must be made conscious and general. Such a spirit does in fact pervade the classrooms and pupil-associations of some magnanimous teachers in many schools. In a very few senior schools it may almost be said to characterize the institutions.

What is this essential quality found in the creative teacher and in the creatively controlled school? It is more than tolerance, more than open-mindedness, more even than coöperation, though these three qualities are fundamental. It is rather the progressive integration of the teachers' own personalities through pupils' successful undertakings of projects in which the stimulus, advice, assistance, and approvals of the teachers are needed and gratefully received.

In an atmosphere of unhappiness, repulsion, suspicion, and fear, such as characterizes the school in which eighty-seven per cent of the graduates have failed at least one subject—and probably an even larger fraction of the eliminated pupils have failed—a nervous tension, a defense mechanism involving complaint and blame, a restless, hopeless discontent are almost inescapable. In such schools, many pupils and teachers, both as groups and as individuals, are in an accelerating process of disintegration. They cannot control their environments; they feel deficient; they revert to infantilism; they seek security in a system, in an institution. For the teacher, temporary security of a sort is found in tests and marks; for the pupil, it is sought in athletics, gang-life, and disorder.

In a broadly conceived educational institution, such as our general high schools may become and such as the California compulsory part-time day school must be, all youths will find security in success and all teachers will integrate their own professional personalities through sharing in the pupils' successes. It is thus that our outstanding effective high-school teachers now function. The new spirit which will surely underlie such educational practices will be characterized by an optimistic expectation of universal victory for every youth's genius. Such victories will demand broad curriculum opportunities, individual methods, and diversified outcomes and expressions. As artist, as athlete, as musician, as *entrepreneur*, as politician, as linguist, as dramatic creator, or as poet, each pupil will find his niche in some aspect of school and class activities. In his success his fellows and his teachers will share. A spirit of beauty, of joy, and of growth will pervade school life. So let it be!

P. W. L. C.

CREATIVE EDUCATION

HAMILTON HOLT

EDITOR'S NOTE: *Hamilton Holt, known to educators through his daring attack on the conventional methods of college teaching and through the beginnings of his demonstration, at Rollins College, of a more adequate approach to the problem, summarizes in the following article the basic principles of his plan. So perfectly are these principles in keeping with secondary-school needs that it would be possible, almost throughout the article, to substitute "high school" for "college," wherever the latter word occurs, without affecting the essential truth of the statements.*

A. D. W.

There are, in my opinion, two necessary factors in successful education: students who wish to learn and teachers who wish to teach. In spite of the fact that both of these limiting phrases are supposed to be taken for granted in defining either group, they frequently do not apply in the least. Many teachers want to write or do research,

or both, and look upon the teaching function of their work as a necessary evil. And certainly no one will deny that the term "student" has no real application for a goodly proportion of the young people who attend colleges and universities.

To bring these two necessary factors together under circumstances most favorable to the intellectual and imaginative stimulus of both has been our problem at Rollins College. That we are on the right track seems evident from the zest and enthusiasm of both students and teachers in their respective quests. Within the limits of possibility, Rollins College has patterned its mode of life upon normal living rather than upon the artificialities of the usual college or university existence. Wherever the traditional form of imparting information or of gaining it has seemed to fail, we have thrown it overboard and established in its place an approach which has all the impetus of the standards of interest which prevail in the outside world of affairs.

When I became president of Rollins College four years ago, I knew very definitely what I did not want in the way of educational methods for I had suffered under the lecture system and the recitation system for too many years not to know how seriously they may handicap any real flowering of a student's mind; how eagerness may be replaced by indifference, and finally by boredom.

It seemed to me that a college education should be a joint adventure, a thrilling adventure in which the accumulated knowledge and wisdom of all the ages forms a sort of hunting preserve where, under the guidance of seasoned sportsmen, the amateur may track down and bag his own game. What, conceivably, could have more zest for the adventurous, for the alive, for the curious, than to learn something about this game of living from men and women who have made the history and the literature of the world? What an enormous advantage it should be to the young, alert, eager mind to spend four years in salvaging from the past the treasures of its records.

And just how much of an adventure does it prove to the average student who sits passively under the drone of the college lecturer, or who learns a prescribed lesson which he, in common with the rest of the class, spends an hour in passing back piecemeal to the teacher who is the inquisitor? It becomes a dull routine which only the exceptional student, by his own short cuts and his own delving, can rise above. No wonder the cry is everywhere rising that the product of our system of higher education is a stereotyped, standardized one, in which the flame of individual initiative and invention has often burned out.

The forces which, it seemed to me, make for this failure of education in American institutions are three: first, the insatiable impulse to expand materially; second, the glorification of research at the expense of teaching; and third, the lack of human contact between teacher and student.

There are, of course, certain advantages in mere numbers. Obviously, the larger the student body, the more diversified and the more comprehensive can be the curriculum, and the more varied the student activities within and without the classroom. On the other hand, as the enrollment multiplies, the ratio of the individual student to the whole tends to approximate a cipher. Only the mature or exceptional student achieves academic, social, or athletic honors. The average student often loses his courage under the keenness of the competition. Not infrequently he acquires an inferiority complex which not only blights his college life but from which it may take him years to recover.

Whatever advantages mere size of student enrollment and impressive cubic feet of buildings may have, we felt at Rollins that the disadvantages to the individual student far outweighed them, and so we lim-

ited our student body to 700. At the present time, we have only 310 students because that is the maximum number our present resources permit us to care for, but those 310 are gathered in from 34 States and 8 foreign countries . . . a fact which in itself gives breadth of view and a certain cosmopolitan stature to our student group. Rollins College, situated in Winter Park, is within forty-eight hours of 75 per cent of America's population.

Happily, the realization seems to be growing that rate of expansion is not necessarily a measure of success and a few institutions are beginning to limit enrollment. But even though the menace of wholesale growth is coming to be appreciated, another menace—the mania for research—continues to thrive and to receive encouragement.

I am willing to venture the opinion that any one of us who looks back over his college days with any glow of appreciation for what they meant to him in an academic way, does so because of two or three figures which stand out against a colorless background like huge shadows thrown against a blank wall. Perhaps only one figure stands out as a revelation of what a real teacher may be. Strangely enough, these teacher-professors—the men who are primarily interested in teaching students rather than subjects, are usually not the ones who win promotions or calls from other colleges. Yet it is these rare souls who make the real impressions on the students. Wherever they are to be found, the students with unerring instinct elect their courses, preferring them to the most world-renowned researcher on the faculty.

Rollins College faculty was then the first great problem to be solved. We sought inspiring teachers wherever we could find them, disregarding the modern fetish for research and weighing not only the ordinary and official recommendations as to a man's teaching ability, but giving especial heed to the opinion of his former students. No matter how scholarly a man might be, or how many books he might have to his credit, he was not considered unless he proved to have that divine gift for guiding and encouraging others which is of the essence of good teaching.

Moreover, since it seemed impossible to suppose that one man could handle a class of forty or fifty students in a manner to give inspiration to them all, we have made sure of close contact between students and faculty by limiting classes to groups of 20. For our 310 students at Rollins, there are 31 teachers.

We have tried to solve the problem of bringing the teacher and taught together by abolishing both the recitation and the lecture systems, and establishing in their places the so-called "two-hour conference plan." This proposal has for its purpose, and hopes to effect, continuous consultation and coöperation between teacher and student. The theory behind this innovation is that the student's mind is immature, that frequently he does not know how to study, and that he most needs the professor when he is preparing his lesson and not after he has learned or failed to learn it.

To visit Rollins classrooms is to have a new experience in college methods of instruction. The students sit in comfortable chairs scattered around a book-lined room, or they gather about a table. The room may be silent, with every one quietly reading or writing, or there may be a buzz of conversation as various groups discuss some aspect of the subject they are studying. The teacher sits at his desk, neither lecturing nor hearing a recitation. His primary function is to sit still, keep quiet, and be ready to help any one who needs help—to answer rather than to ask questions. He does not do the work for the students but guides and stimulates them. He may even refuse to answer questions if he feels it will be more helpful for them to work out

the answers for themselves. Of course, parts of some periods are given over to talks by the teacher, assignment of work, group questioning—even old-fashioned quizzes. But for the most part the teacher's work is with individual students, each of whom may be at a different stage of advancement in the course. When there is something to say, they talk. When there is nothing to say, all work, as in a well-managed business office.

At present the Rollins conference plan provides for class periods of two hours' duration, but its essential feature is its flexibility. In some classes all students may be required to spend the entire two hours in the classroom with the exception of a few minutes' respite. In others, part of them may go to the library, or elsewhere, to do some of their studying. In yet others the professor may not keep the group together for the entire two hours. Often the students are so interested in the subject under discussion that they voluntarily remain longer than the allotted time. Typical of the plan's flexibility is an English class in which the professor, seeing some of the pupils farther advanced than others, permitted that little group to spend the regular class period in writing whatever they wanted, meeting together at his home on Sunday evenings to read the product of this free time.

As part of the conference plan, regular term and yearly examinations have been minimized and even tests and quizzes are not stressed. Moreover, it is intended that since all necessary studying may be done in the classroom, virtually all the student's outside time shall be free. Thus the Oxford and Cambridge ideal of the allowance of much leisure is at least partially carried out; there is time to think, to engage in semi-serious intellectual discussion, to digest the lessons of the day, or if the student desires, to do advanced work, or even to complete his course in less than the conventional four years.

Another characteristic of study at Rollins is the fact that students are given every opportunity to get at the source of information themselves. Nothing is taken second hand which may be acquired first hand. No opportunity is lost to replace textbooks with life; a biology-class journey to Tarpon Springs to study the sponge industry, where "a barefoot Greek diver on a picturesque ocean sailboat" was for the moment the instructor of the class; students interested in journalism attend the State Press Conference; the surveying class goes to Tampa to study cement making; the International Relations Club gathers at the President's house to meet informally with a recent Prime Minister of Italy and an officer of the French Academy; the entomology group does the same to meet a great neurologist, whose hobby happens to be beetles; the sociology class spends a week-end digging in ancient Indian mounds; a physics class drives to Daytona Beach to study high-powered automobiles, comparing structure, motor power, wind resistance, and cooling systems of the cars of two world champion drivers; a class in the History of the Book follows the actual production of a book from the original manuscript to a beautifully finished volume issued by the professor's private press; a history class makes a trip to St. Augustine to meet with the Florida Historical Society and study the oldest city in the United States and to discover the part it played in our early colonization.

Throughout the daily chronicle of college life, there runs this thread of vigorous activity, of awareness of what is going on in the world, of eagerness to relate the studies of the classroom to outside practical affairs. The whole emphasis at Rollins, whether in the curriculum, teaching method, or community life, is upon the full and free development of the individual, and the stu-

dent early comes to feel that the college wants to put itself at his disposal rather than put him through a course of intellectual sprouts. Rollins trusts its students, assumes that they are there to get an education, and that they do not need to be driven.

This confidence extends to the conduct of student affairs, and even to matters of discipline. A board of appeal containing four students and three faculty members can be resorted to by any student who feels that he has been unfairly treated by the administration. But in the two years of its existence it has not even been asked to function.

"Rollins College," writes one of last year's graduates in the December issue of the *Review of Reviews*, "is the happiest place I have known. It is a sunny oasis, full of people who thoroughly enjoy what they are doing and who are free to do it without interruption. . . . Whether as a result of the two-hour conference plan or of the southern cooking at the 'beanery,' there is interest not only in study but in the business of living. It shows itself in the liveliness of the classroom arguments. It ought to show still more, in a few years, in the activities of those fortunate beings who have received their college education here or in another college following the same plan."

We dare to believe at Rollins that the zest of adventure in education will carry over into activities of after-college life, for a habit of thought and an attitude towards life are difficult things to lose.

THE GROUP-STUDY PLAN
A TEACHING TECHNIQUE FOR THE JUNIOR HIGH SCHOOL

EDWARD R. MAGUIRE

EDITOR'S NOTE: *Edward R. Maguire is principal of Junior High School* 61, *Borough of the Bronx, New York City. His book,* The Group Study Plan, *has introduced him to so many people that further introduction here seems unnecessary. The most significant thing that can be said, perhaps, is that the practices described in the book and in the article that follows are in daily operation in Junior High School* 61, *and are proving their worth.* A. D. W.

In 1923, Superintendent Glass gave the point of departure for any attempt to solve the problem of a teaching technique for the junior high school. "The point of view of the junior high school," he states, "is individual . . . placing each pupil in his proper group . . . adaptation of educational offerings to individual needs . . . democratic . . . the square deal . . ."; and "upon its method, rather than upon its organization, will depend its fullest success."[1] In 1926, Superintendent Weet stated a basic objective: "to give to each according to his needs and to demand from each according to his abilities."[2] In the same year Dean Russell enunciated the social aim: "Good citizenship as a dominant aim is something entirely new . . . puts an entirely new emphasis upon methods of teaching." In 1929, Professor Cox strikes the highest note: "The junior high school can be a preparation for a more adequate social life than any that has yet been known if it can only reproduce within itself situations that are typical of a purified and idealized society—a truly creatively controlled school environment."[3] A teaching tech-

[1] James M. Glass, "The Junior High School," *The New Republic*, November 7, 1923.

[2] Herbert S. Weet, "Educational Objectives of the Junior High School," *Proceedings of the National Education Association*, 1926, p. 764.

[3] Philip W. L. Cox, *The Junior High School and Its Curriculum* (Scribner's, 1929).

nique for the junior high school must provide a classroom procedure functioning through these objectives.

The group-study plan is offered for consideration as a junior-high-school classroom technique because its goals coincide with the objectives of that school. It is a procedure through which the objectives are made functional in the classroom. The school lives in its classrooms; as these function so will the school's vitality be measured. Democracy, pupil-participation, leadership, followership, self-direction, character development, socialization, individuation, citizenship: these are goals of the group-study plan. They are also objectives of the modern school. The group-study technique puts them to work in every period of the school day, habituates them, vitalizes them, and makes them basic.

These goals are, in a large sense, connotations and specializations of what is meant by modern teaching. Modern teaching is creative, seeking, through self-active learning, to develop individual reaction and responsibility for behavior. It follows, then, that traditional ideals will be closely scrutinized and possibly rejected and that newer ideals will take their places. The needs of society today are a new understanding of democracy, a recognition of the values of participation, of coöperation, of the social project. With these ideals in mind, teaching itself needs a new definition.

Teaching, in the modern sense, is guidance, directing learning. It is "causing to learn."[4] Learning as growth was defined by Dewey thirty years ago. Today, learning is defined by Palmer as a transformation of processes. "All learning," he says, "is a change, a growth, a transformation of processes that results in a new way of behaving."[5] In short, the learning is the measure of the teaching, and it is towards the learning process we must look. We must base our technique upon the learning and the learner rather than upon the teaching and the teacher, and upon the learning product as determining the character of the learning process.

It is agreed that learning results from action in the group wherein the child lives and moves and has his being, that "the social self is the only true self.[6] . . . The most important function of the school is to help each pupil identify himself with a worthy social self. This is peculiarly the function of the junior high school."[6] The question is, then, what can the pupil do in the classroom that will so identify him? There are four things the pupil can do: (1) study, (2) discuss with his peers, (3) evaluate his and their work, (4) govern himself and the society of the room. These are his contributions to the pupil-teacher partnership which he willingly and readily and freely gives. The teacher's contribution is guidance. This is the learning process in the group-study plan; the learning products are (1) ability to do, (2) understandings, (3) appreciations,[7] and (4) character education. Nature provides the pupil with qualities that help his contribution: curiosity, restlessness, talkativeness, combativeness, acquisitiveness, desire for social approval, self-esteem, and will.[8] From the same source and from the training schools, experience, and even supervisory visitations, the teacher becomes the possessor of wisdom—thus the guidance remains guidance!

The technique is, then, a study procedure, a discussion procedure, an evaluation and government procedure—made individual and social—and a guidance procedure; with clearly defined duties of pupil and of teacher. It provides mechanizations so that these may be unified and diversified and made as far as possible automatic. It is

[4] E. R. Maguire, *The Group-Study Plan* (Scribner's, 1928).
[5] A. R. Palmer, *Progressive Practices in Directing Learning* (Macmillan, 1929).
[6] Philip W. L. Cox, *op. cit.*
[7] A. R. Palmer, *op. cit.*
[8] *See* C. L. Robbins, *The Will to Work* (Row, Peterson and Company, 1928).

a committee plan. It breaks the "class" into committees on a group project basis so that every individual is an individual and a partner; a partner with his fellows and a partner with the teacher. It supplies a prospectus for unity of class achievement and a checking system for individual objectivity. Its head is in the clouds; its feet are on the ground. It brings the "gang spirit" into the classroom. And freedom! It sets the pupil free and the teacher free; the pupil to attend to the duties of learning, and the teacher to function where he is needed. Thus the pupil-teacher partnership forms automatically, because the pupil, as soon as he becomes an active agent in the class life, realizes that the learning process and the teaching process are interdependent parts of the same machine; that the pupil's ideal is the teacher's ideal.

The group-study plan is a self-directed study technique; and it provides within itself its own obligation upon the teacher so that this phase may function. There is nothing new about study. But there is a vast amount of ignorance upon the part of class teachers as to just how study should be done. When the pupil is once introduced to the "study steps," which are guide lines in the organization of study effort, and understands their import, the battle is over so far as he is concerned. The study steps are: (1) I state my problem; (2) I analyze my problem; (3) I plan my work; (4) I work my plan; (5) I survey my result. The pupil finds that they are effective, because, when a problem is actually understood, then broken into its parts, then the attack organized and planned and the result checked by himself first, by his peers next, and by the teacher last, there comes a result which he calls success, and success is no trifle in a junior high school!

Discussion, the second of the pupil activities, goes on vividly in the group-study technique. These discussion groups work under leaders who are chosen because of their superior achievement, or arbitrarily in advance by the teacher (a procedure which has obvious results—at least upon the leader). They talk in low tones, recite to each other (these are evaluations), comment upon and check each other's offerings. It is a very natural operation, and when the teacher joins them the "gang" is complete and the survey is final. The teacher is free to join because the other groups in the room are all functioning on their own problems. Responsibility has shifted; the pupils are carrying their share and rejoicing in it.

Evaluations, or surveys, or checks follow, as far as possible, survey guide lines for unity. These guide lines are charted for convenience; the charts hang on the classroom walls and are copied into notebooks for constant use. This serves to keep the effort following lines of certainty and definiteness. The prospectus which each pupil has indicates the line his work should take; the survey follows the same lines. Hence there is no doubt and no dissatisfaction, and when a job is done, it's done. Democracy is achieved in the group check because the doer accepts the judgment of his peers. The teacher uses his opportunity of the check to form apperceptive judgments for new groupings with new assignments to fit the needs of individuals as the check reveals them.

The government factor is democracy in the classroom. The responsibility is the pupil's because the government or lack of government in the room affects *his* learning, *his* growth. Noise or confusion in the classroom menaces the learning, not the teaching; annoys the learner, not the teacher. It is a pupil-centered school, not a teacher-placidity school. This condition realized by the pupil, the result is a compliment to his ability and his judgment. The "discipline" factor takes care of itself. Laws of the classroom are made for and by the pupils. The dominating teacher is *passé;* the teacher in the background is

more effective; he is ultimate rather than primary. The question simply doesn't come up.

Guidance, a teacher function, operates continuously, quietly. It is effective because it is never scattered; it is efficient because it is always directed to small groups or to individual needs. Group guidance is vital because of the homogeneity of the grouping; individual guidance needs no comment. All the guidance takes the form of indicating lines of organization of study effort based on needs as observed and noted by the teacher in his group checking. It is, in effect, "guidance in worthy use of school time,"[9] a real step in the guidance program.

The other goals of the group-study plan are outgrowths and by-products. *Democracy* is inherent in the classroom organization; *leadership* possibilities have been indicated; *coöperation* functions because the pupil-teacher partnership has been set up through the group routines—the gang spirit takes care of this; *self-activity, self-direction, individuation,* and *socialization* operate because the groupings develop life situations from which they spring. And these life situations are the fundamentals of *character education.* The goals we have mentioned are character-education goals. In truth it is believed we have a character-education technique. If this proves true, it is a consummation devoutly to be automatized.

There are two goals remaining that are worth mentioning. These are *joy* and *good will.* Joy in his school work is the right of every junior-high-school boy and girl. And it should follow every "assignment," because that assignment in the group-study plan is directed to his individual needs, his individual weaknesses, or the needs and weaknesses of his group which he shares with them. The individually fitted assignment is economy in action. It gives scope for artistry on the teacher's part and invites success on the pupil's. His study and discussion following a perfectly fitted assignment ought to be successful; and success breeds success. We succeed by our success. The inferiority complex must be routed. Failure is deadly: success is joy in achievement. The schoolmaster in a junior high school has the greatest of educational and human opportunity in affording scope for this and in noting his results. What a reward! When an "adjustment-class" pupil who has entered the junior high school with a failure record from the elementary school comes into the office with an oil painting he has done, when another sets up a museum in the school filled with live specimens of snakes and salamanders, frogs and fishes; when a "slow-progress" pupil presents a string trio (of which he is leader) for auditorium concerts, has his programs mimeographed and distributed, and lectures to six hundred of his fellows on music, with lantern-slide illustrations; when a girl of the same type shows embroidery of fine design and color and execution—when these things come out of an individualized school environment, it's worth while. Incidents of this character occur almost daily. What an opportunity for case studies!

Good will is the highest aim of all. Tradition, or what have you, to the contrary notwithstanding—all traditions having gone into the discard in 1914—the greatest objective of every school in the world today is good will. World peace is the world's greatest need and the world's greatest problem. And world peace will come only through education. The present generation of junior-high-school boys and girls will decide this question, and they will decide it out of their experience, not out of their knowledge. Let them then, in every school in this astigmatic universe, *learn* the art of peace. Let them be trained in a school technique which is based not upon compe-

[9] Cf. *The Classroom Teacher* (The Classroom Teacher Publishing Company, Chicago.)

tition but upon coöperation. Let them learn the joy of the SOS corners of the group-study classroom—corners where the quickest to learn are rewarded by being permitted to help the slowest. Let them see that each is his brother's keeper, and that the watchword is, not "they shall not pass!" but those other words, dear to every American heart: *"They shall not fail!"*

Let me end by quoting a letter received from the principal of one of New York's great senior high schools in 1927:

> You will no doubt be interested in the enclosed sheet which shows just how much service Junior High School 61 girls are now giving to Walton.
>
> I hope you will be pleased to know that we find the girls exceedingly confident, full of initiative, and *good will.**
>
> Yours very truly,
>
> (signed) MARY A. CONLON

*The italics are ours.

EXPERIENCE AND THE EXPERT

HOWARD DARE WHITE

EDITOR'S NOTE: *Howard Dare White is assistant commissioner of education and supervisor of secondary education for the State of New Jersey. His progressive attitude and liberal viewpoint in educational matters are too well known to need comment here.* A. D. W.

The attempt to put additional meaning into words by using some more words has never been quite successful. We are not going to give up the attempt, but I hope that we can avoid some of the confusion into which it has led us and put less faith in it as a source of certainty. We must continue to depend on language as our fundamental and most convenient *means* of communication while we continue our effort to make sure that communication is actually effected, that some one understands us; if possible, that every one understands us. Words must carry a meaning and somehow deliver it. Otherwise silence or clean white paper would be more economical and just as useful.

So the speaker or writer has a certain responsibility.

During my own lapse from silence this morning I shall attempt to do four things:

First, I am anxious to defend anew a double thesis so trite that it has always for me the aspect of complete novelty—the thesis that the expert becomes an expert only because of his experiences, and that it is our business to contrive that every one shall be an expert.

Second, to help pay a long overdue debt of disrespect to a false philosophy which has had deplorable consequences.

Third, to report some encouraging signs that New Jersey secondary schools are freeing themselves from the influence of that philosophy and freeing their pupils from some of its consequences.

Fourth, to suggest a few practices that may help us to continue our emancipation.

The Southern mammy who defined experience as "what you gets when you don't listen to what the old folks tells you" came near to a sufficient definition, with just a hint that experience may not be always pleasant, that it requires effort, and that we who dare to teach are likely to suggest substitutes for it.

The story of the man who refused to go near the water until he had learned to swim is probably a very old story. It sounds old; but it was the philosopher Hegel who thought to retell the story and to name its hero "Scholasticus" to the discomfort of many generations of schoolmasters.

Both the Southern mammy and the distinctly Nordic philosopher told the same story and were trying to teach the same

necessary lesson, that essential learning not only involves but is experience; that it leaves the learner a different being—not the same being possessed of some learning. The curriculum the learner uses, the course he runs, is *his* curriculum, his course, and includes all the experiences that he gets and no others. His discipline and control are the discipline and control he gives himself and he can't get them from any one else. Restraint, obstacle, frustration, inhibition, curbing—unhappiness generally we can give him all too easily, and there are those who think that we should. Or, more happily, we may provide encouragement, wholesome opportunity in rich abundance, views of what is before him, alert watchfulness, help, guidance, as he runs his course. In spite of conflicting counsels it seems to me that this is what we should do.

The critic who objected to this point of view and was quoted as saying that "the cow, grazing lazily in the pasture, munching only what appears pleasant to the eye and satisfying to the stomach is the pattern of today's education" might well have ruminated further and thought of a simile better suited to his purpose. Experts in the nature and nurture of cows assure me that he described the minimum essentials, at least, of an excellent cow curriculum.

An appropriate curriculum for pupils also is one that they can see and in which they make choices and are satisfied. We are undertaking, from the side lines if you please—certainly not by getting in their way—to see that all pupils have an excellent curriculum.

It would be easier for us if we could take the whole responsibility. But we can't; for all their learning must be in the realm of their own mind-body experiences and they must become experts in their own right if at all.

We must manage that they succeed, that they learn to do well and with satisfaction the things that every one must do, and the additional things that their individual qualities, abilities, and attitudes make it possible, satisfactory, and useful for them to do; and that will be enough. The doing of it, furthermore, will provide that our pupils will all be experts, that their growth will continue, and that we too will have abundant opportunity to grow.

That we are rather slowly admitting this to ourselves and still more slowly translating our revised beliefs into revised practice is due partly to inertia. But even more than by inertia we have been held back by a vicious tradition that separates and attempts to account for the separate experiences of mind and body. I don't mean that it ever did any harm to try to explain and classify experience, but that a false antithesis exalting supposed intellectual experience and discrediting physical facts has had too much influence on our practice. The notion that the mind can go off on a rather noble quest for knowledge, leaving the body at home to do the menial chores of sense-perception, is perhaps too fantastic a way of stating this. But I insist that the antithesis is a false one and that it has done an enormous amount of harm.

Intellectual pursuits are lofty. Other occupation is on a lower plane. Study is respectable and activity interferes with study. High school was, until lately, and college is yet, a patrician institution. There is something plebeian about vocational school or shop. Professions are of higher rank than trades. Our college-preparatory curricula are for the superior pupils, other courses for inferior pupils.

There are a dozen ways of stating it, but the meaning is the same. We do not yet give up the idea of education as a thing, an aristocratic commodity for superior people.

Of course, the trouble has been that we have exaggerated the importance of knowledge about things to the point where it has seemed necessary or socially advantageous

to have some knowledge about everything. Our textbook curriculum was a natural development from this, with lesson learning, fragments of recitation, the accumulation of credits, and a final diploma decoration following in logical order.

The schools, at least, have been honest about all this but they have not been bravely critical of their own aims and their pupils are much too docile. Convinced that knowledge about things is desirable, with but little practice in comparing values, they are the dupes of specious advertising. Knowledge is a kind of wealth; we must be rich, or at least solvent; or, if we can't be either, we must conceal the evidence of our insolvency as long as possible. It is no wonder then that we are tempted to pretend expertness in things about which we know nothing except their names and that the whole flock of outlines, compendiums, digests—shoddy substitutes for experience—find a ready sale.

We do not complain that people read books or even that they read books that are worthless to us. It is inevitable that some of our experience will be wasted. But to read without any motive except a vague notion that there is virtue in reading or because some one has recommended it, is the most futile self-deception that I can imagine—whether the reader reads fifteen minutes a day or two hours, whether at the command of the Book-of-the-Month Club or the university professor. Reading is a form of experience and cannot possibly serve the same purpose for any two people.

The question of what is quaintly called vicarious experience has something to do with books and reading. The question need not be evaded. There is no room for serious disagreement about it.

We do want to preserve the culture of the past. Our generation and future generations must have a background. Civilization is worth studying and trying to understand. The light of the past twenty-five centuries does reveal something to some people.

But, while we ought to be very respectful towards genuine scholarship, are we really serving it well in fostering the illusion that knowledge about everything is either possible or desirable?

I should like to recommend here a policy of selective ignorance. Ignorance is really not a disease; it is a perfectly natural and healthy state. Most of us admit, or rather proclaim, that we have generous quantities of it. But we do it rather hastily as if to be the first to mention it and as if it were something to be rather ashamed of. It is nothing to be ashamed of, or proud of, or self-conscious about in any way. All of us are grossly and properly ignorant of many things that are matters of keen interest and intimate knowledge to many of our colleagues and to many of our pupils. Can we not recognize the perfect naturalness of this in our guidance of pupils? We already agree pretty well in words. There is gradually accumulating evidence in practice also that we accept new values and are not trying to realize them entirely by conventional means.

New Jersey high schools welcome new ideas and, I hope, are critical of them. They need also to be hospitable towards old ideas and to be critical of them, avoiding the popular delusion that conservative and progressive are words of opposite meaning and that one of them is better than the other. Earnestly as we desire the adoption of a new point of view and a transfer of emphasis from textbooks to ways of behavior, no one really plans to accomplish that adoption and transfer by discarding the teaching materials we now have.

To report all the experimental things that our schools are doing would be out of the question. Descriptive reports are hard to get. Either too much caution or undue modesty keeps many accounts of interesting experiment from us. There is a section of

the annual high-school report blank for New Jersey which is intended for such accounts. That section is the most important one in the whole report.

One of our most promising experiments is the project sponsored by a committee of the Department of Secondary School Principals of the National Education Association. This proposes that groups of high-school principals carry on some coöperative investigation of questions like these: What are the facts about the comparative efficiency of large and small classes? How may new teachers be most effectively introduced into the service of a school? What are some of the observed merits and demerits of ability grouping of pupils? What are the handicaps of the small school and how may they be met?

At least two such groups have been formed and have begun their study. The particular promise of this movement is that it brings to actual trial some of the things we have been saying about school practice. A rather small group of secondary-school principals who want to find the facts about a definite problem that really interests them have some chance of finding those facts. It is important that these experiments be limited in scope to the trial and determination of things we need and want to know. It would be unfortunate for it to become faddish or fashionable. Even if there are no more such groups formed for the present, the method of approach is a promising one for it looks towards the solution of particular problems rather than a group solution of general problems. The groups should be small and composed of principals who can get together easily and often, and who have already had some practice in coöperation.

Our high schools are looking for better ways to serve the beginning pupil. This is one of the problems of articulation that ought not to be a problem. In a school system where pupils begin their secondary-school experience naturally and comfortably in a junior high school and where continuous healthy growth through the whole secondary-school period is the avowed aim, the problem is hard enough. But a very large proportion of our ninth-grade pupils come from other school districts and enter the last year of a junior high school or the tenth year of either a senior high school or a four-year high school. The result is often disappointing and uncomfortable for pupils and teachers alike. The conventional solution first thought of is a demand for still more uniformity. Several schools are seeking a better solution through conference and understanding between the school districts concerned and through a definite welcoming and friendly guidance specially provided for the new pupil. Many schools go a significant step farther than this. The Montclair Senior High School, for example, makes a special business of providing for pupils with "irregular preparation," and does it without emphasizing their irregularity and without implying that any one is to blame for it. Mr. Ferguson's discussion of this subject in the September number of the JUNIOR-SENIOR HIGH SCHOOL CLEARING HOUSE would convince you that his school is concerned with the needs and interests as well as with the abilities of its pupils. One sentence must be quoted: "Exploration, guidance, and adjustment do not end with the ninth year."

In the same number you may care to read what Mr. Runnels has to say about articulation. He also suggests that we should serve the needs of pupils continuously instead of at junction points.

Let me name several instances of the special interest that our schools are taking in pupils rather than subjects. They are taken almost at random and similar cases might be chosen from many other schools.

At Point Pleasant much of the work in commercial studies is on an individual unit basis and the class is organized in small

groups. Pupils achieve mastery of units of work at different times, and make no difficulty about working beyond the required and credited units.

The East Orange High School had a group of senior girls who wanted a course in retail selling. They found that the teaching, practice, and experience needed in such a course could be most conveniently offered in the County Vocational School. The school authorities made as good an outline of such a course as could be made in advance, and added it to the high-school curriculum. The "credit" to be given that class for getting what it needs and wants for a half day a week will be just the same as would be given for doing something they didn't need or want. Their course will not be diluted and their diplomas will be just as respectable as those of their more academic fellow students.

The South Orange High School continues the study of pupil needs and pupil interests through the secondary-school period and beyond. Articulation in this school system is a constant rather than a periodic responsibility.

The Bridgeton High School, in spite of the crowding and discomfort caused by building a new building on the same premises occupied by the old one, has time to carry on several projects of educational guidance.

Nutley and Haddonfield have broken rather definitely with the traditional installment plan of examinations and are using examinations to promote learning instead of to promote pupils.

The group of Latin students in Camden who constitute a classical seminar for two hours a week without additional credit are doing work which is curricular for them and they should have credit for it. The probability is that they are having so much fun and are working so hard that they don't know whether the course is credited or not. They are likely using a variety of materials and getting something that very much resembles experience.

Elizabeth is trying to continue its adjustment of courses to the needs of its pupils beyond the ninth year and to make non-college preparatory courses rich and respectable.

Summit uses the homeroom organization as an agency of advice and guidance for the pupils.

The Hackensack High School undertakes by correspondence with all parents and by conference with pupils to prevent failures and assure high scholarship.

Pitman uses its courses in elementary business training and civics, and a special course in the use of school facilities, to give educational and occupational guidance to all pupils.

Neptune Township has employed a special director of pupil guidance.

I have made no attempt to give anything more than a few illustrations of my statement that New Jersey high schools are interested in experimental practice and are making a new study of their responsibility.

You have noticed how frequently the word guidance is used. I hope that it will not come to be a useless word. My understanding is that it covers a wide variety of extremely difficult functions which we are only beginning to understand and to exercise tentatively, and which we will be studying to improve indefinitely.

You can get no actual or expert knowledge of what our schools are doing from anything I have said, only knowledge about them—vicarious experience decidedly. In your own schools you know of more experimental progressive things than any one can tell you about. You are seeing the transfer of emphasis from books to people. You are helping to make the transfer and your own experience, only your own experience, is valid or significant.

A short time ago I was asked to suggest a seminar that is studying ways of freeing

the creative learning energy of children or to name a person competent to give an extension course on the subject. I have undertaken to mention some practices that may help us to free ourselves from hampering tradition.

The best seminar is a group of teachers who want to look afresh at the aims of education and who prefer hard work to routine. Teachers have the same right to continuous growth as pupils. Expertness will come only as the result of experience. An extension course would help, but I suspect that it would start with a study of democratic social philosophy and perhaps never get nearer to methods of teaching than to collect individual examples of pupil learning.

These are my suggestions: We will examine again the aims and purposes of education for people who are alive now and here. We will not discard any present practice or teaching materials that are needed in working towards those aims, but we will not feel bound to keep any simply because we are accustomed to them.

That changes in the public schools are not rapid or spectacular or revolutionary in any one place or in any one year seems to me no cause for discouragement. It is not necessary for progressive schools to wear a look of disheveled haste, nor is it desirable for them to seem queer. Moreover, the public has learned, by experience, to trust and support a conventional and traditional program. It can learn only by experience to accept the experiments and deviations of the experience-permitting school.

I am satisfied that progress is on the way; that soon we will accept health and social understanding as vital parts of our curriculum; and that our pupils will face an uncertain future with a zest for living and at least as much expertness as we have in choosing a way of life.

METHOD AND THE INTEGRATION OF PERSONALITY

PHILIP W. L. COX

Life is an on-going process. From heartbeat to heartbeat, from breath to breath, from meal to meal, and from task to task, human life is always in process of becoming. Life pauses only in death. There are, of course, shades and nuances in life; intensities vary; sleep and sickness and fatigue intervene; relaxation and recreation alternate with work and dynamic drives.

Normal positive living exists only in its progress. There is a momentum to life as there is to a bicycle; it is only stable when it is moving forward. Unlike the machine, however, it moves forward only when set towards objectives which are its own. These objectives cannot be superimposed. Persons may, nevertheless, be helped to formulate and accept for themselves worthy objectives through the advice and guidance of experienced friends who inspire confidence.

In a democratic self-directive society life at all ages is much the same. Positive standards of behavior cannot be superimposed. The city health officer may direct one to keep his garbage pail covered; the traffic officer may give him a ticket for passing a red light; a husky brute may shove him off the sidewalk; a father may beat his son because he smokes; a teacher may "flunk" him because he does not prepare his lessons. Such restrictions and deprivations, however justifiable, are, in themselves, futile. They are negative and immediate and specific; they make no provision for any positive program to modify further behaviors.

There can be no likelihood of any new attitude towards community health and safety, towards ugly revenge, towards smoking, or towards lessons, unless human beings face realities and lay out courses of action by which objectives may be achieved.

Such adjustments *may* involve hygienic living, attention to traffic regulations, self-denials, keeping on the inside of sidewalks, studying assigned lessons, or they may not.

Education itself may be said to consist in helping pupils to set up for themselves objectives which are dynamic, reasonable, and worth while, and in helping them to attain these objectives. In this, it is the dramatic antithesis of conventional class procedures—even of the best of them.

For in them, the curriculum is itself the end of education. Pupils are taught Latin in order that they may know Latin; they are taught mathematics and science and homemaking in order that they may know mathematics and science and homemaking. Whether or not these knowledges are related to any objectives which pupils may have set up for themselves and which are for them dynamic or reasonable or worth while, is seldom—very, very seldom—taken to be significant.

We give verbal acceptance to the seven objectives of the Commission on Reorganization of Secondary Education, to Inglis's three aims, or to some other formulation of purposes and functions of the secondary school. We do, indeed, make earnest and successful attempts to introduce into our school environments many stimulations and practices by which these aims may be realized. But in our classroom methods, the educational progress of children, if any, is largely a by-product of our "teaching." Sometimes children progress in spite of "teaching." Too often, indeed, the educative process is so distorted and perverted as a result of conventional lesson preparation and recitation methods that grave harm is done. Stubbornness, day-dreaming, truancy, and inferiority complexes develop, in part at least, from strict insistence on "mastery," "nagging," and school failure.

It is just the blind acceptance of folk ways that impels us teachers to permit such undesirable conditions to continue. It is our inherited faith in the power of the schools and of subjects to benefit children who are kept from being lazy, put through their paces, driven to master lessons. As we teachers ourselves grasp the significance of more humane and emotionally justifiable methods and as we become confident of their application we are happy and eager to undertake them.

The methodology of helping children to set up objectives which are for them dynamic, reasonable, and worth while, and of helping them to attain these objectives contains little that is of intrinsic difficulty. It does demand, however, that pupils shall not all perform the same tasks on the same day, for objectives will differ as individual children differ. It does require objectives that are of more inherent significance than getting good marks or avoiding disagreeable comments by the teacher; propulsive, inherently satisfying objectives are necessary.

Even for those pupils who seem to move and live and have their being in teacher approvals and honor rolls and high marks, the conventional system is harmful. For they are accepting an artificial world that has no counterpart in reality anywhere except in other academic schoolrooms. They are thus divorced from reality. There often result serious maladjustments when these boys and girls emerge from their hothouse school world and deal with men and women and youths who will not accept docility and mechanical efficiency as the equivalent of, or as a substitute for, initiative, self-reliance, and resourcefulness.

As a matter of fact, we know too little of the relation between school success and life success to justify us in being very positive in our school requirements. So many school failures and unschooled persons have succeeded in all phases of social life, and so many valedictorians have failed in life that we must hesitate to identify academic improvement with education.

Our measures of improvement themselves

are open to question. Even if they were really adequate, however, they would show little to give us assurance.

Too often, we high-school people, especially those of us who teach academic subjects, live in a world of ghosts and mysticism. Our conventional practices are based on a premise that has never been honestly examined. The assumption behind our academic curriculum is that the mastery of geometry, Latin, English literature, or chemistry is of positive benefit to all who obtain it.

Because we do blindly accept the assumption of inevitability and beneficence of the high-school curriculum, we focus our constructive efforts on the improvement of curriculum organization and methodology in order to improve pupils' control of subject matter. And we devise measures on the basis of which we pronounce method A superior to method B, or curriculum organization I superior to curriculum organization II. We seem not to care that children retain little of what we so meticulously teach and test and teach again, and what they so painfully and joylessly learn to recite. It does not often disturb us that college students so seldom continue Latin, mathematics, and formal English beyond the point of prescription. It is no affair of ours apparently if our graduates seldom read any Latin or French, Tennyson, or history, or solve mathematics problems after all the hours of work they and we have expended on these subjects.[1]

Perhaps, we have never cared enough about these conditions to know of their existence or to pay much attention to them now when they are pointed out. Let us review briefly some facts that are at present available.

Are Children Improved in School Skills by School Learning? Recent investigations in achievements in written English—cited by Leonard in his editorial in the June, 1929, issue of the *Journal of Educational Research*—indicate that pupils' out-of-school English usages are not affected by high-school instruction and that the best seventh-grade pupils use quite as good English as the best twelfth-grade pupils! Some years ago Brown found that in Latin translation the best pupils made little or no progress from the tenth to the twelfth grades. Even in algebra and modern languages increasing mastery of the average pupil depends quite as much on the elimination of those who have not mastered the techniques as on the growth in power of those who continue.

In the 1928 Yearbook of the National Society for the Study of Education are several studies which show how unfounded is the assumption that "standards" of achievement are related to quality of teaching or even to the subjects studied. Terman in summarizing these investigations says: "One of these fails to find any statistically significant difference between the subject-matter achievement of pupils taught by 'best' teachers and the achievement of those taught by 'poorest' teachers. Other investigations have shown that achievement is affected to an astonishingly small extent by size of class or by the use of widely different methods of instruction. Thus it seems to make little difference in ultimate achievement whether a pupil is taught phonics or not; whether he is taught reading by the word or the sentence method, or by some other method; whether he is taught spelling as a separate subject or not; or whether 12 per cent or 25 per cent of the total school time is given to arithmetic. . . ."

If these conclusions are sound what is the inference? The control of subject matter and the ability to do certain work, say of the ninth grade, or of the freshman year of the college, depend less upon the subject matter that has been mastered (or the class methods that have been used) than they do upon general intellectual ability and continuing life interests.

[1] Bureau of Education, Bulletin, 1927, No. 16, "The Reading of Modern Foreign Languages," pp. 28-32.

Is the Mastery of Conventional High-School Subject Matter Essential for College Success? Proctor has shown conclusively, for the colleges which he studied, that no high-school subject beyond ninth-grade English is regularly enough used by college students to justify its inclusion as a prescription for college admittance.[2] In Wellesley, which requires four years of high-school Latin for admission, only ten per cent of the students continue their Latin.[3] At Harvard, of the 839 members of the class of 1931, 19 "concentrated" in Latin and 30 in mathematics, as against 151 in economics, 121 in English, and 87 in history.[4]

In spite of the discovery by Odell, Whitman, and others that the measurement of scholastic achievement, whether by teachers' marks, by objective tests, or by college-admission examinations, has scarcely better prognostic value even for scholastic success in college than have pure guesses, colleges continue to lean on this broken reed. Even though Fleming has shown that, next to "general intelligence" and silent reading ability, -the dynamic personal qualities—industry, persistence, desire to excel, energy, and emotional stability—are of primary importance for educational success, academic college-admission committees continue to pin their faith on scholastic marks rather than on these socially significant characteristics.

Do High-School Academic Subjects Result in Life Enthusiasms? In the recent modern-language investigation letters were sent to many high-school graduates who had studied modern foreign languages. The great majority were glad that they had studied foreign languages; but painfully few were able to assert that they had read any foreign literature in the original since completing their school studies.[5] In Latin, mathematics, and the English classics, the situation must be even more discouraging. Though we have no actual data on which to base this statement, common observation and the testimony of librarians justify it. Indeed, teachers of these subjects alone seem to retain any familiarity with high-school subject matter, and it is often embarrassing to them to reply to questions regarding present enthusiasms and growths even in their own subject fields.

PROGRESSIVE PRACTICES ARE PROMISING; BUT THEY MUST HAVE AS A UNIFYING PHILOSOPHY THE IMPORTANCE OF THE INTEGRATION OF PUPIL PERSONALITY

Since our "teach-and-test" program is obviously carrying us around in a circle and getting us exactly nowhere, may we not frankly recognize that pupils get their own education from their environments? If we do so recognize the challenge, our methodology must be directed to the orientation of pupils in their environments and to their enthusiasms and competences to deal with the factors and forces thereof. In other words, our methods must aim primarily at the integration of pupils' personalities.

We have little to lose and a world to gain by modifying our methodology in terms of human behavior and attitudes rather than in terms of "mastery," marks, and examination passing. If, in the light of our present positive knowledge of the futility of teaching verbal facts and abstract skills, we schoolmen cannot reconstruct our practices in accordance with human needs and possibilities, then we are indeed incompetents at whom the generations to come must look with amazement.

It is not, however, a change in general procedure that is required; rather it is a revolutionary change in viewpoint, purpose,

[2] *Journal of Educational Research*, February, 1927, pp. 87-92.

[3] T. H. Briggs, in address at Secondary Group Meeting, Teachers College, October 21, 1929.

[4] Harvard Alumni Bulletin, December 13, 1928, p. 346.

[5] Bureau of Education, Bulletin, 1927, No. 16, "The Reading of Modern Foreign Languages," pp. 28-31.

and emphasis. There is room enough within most modern methods for this revision without losing whatever advantages they may possess as organizations of procedure.

MODERN METHODS IN THE LIGHT OF PERSONAL FULFILLMENT

Lesson-Preparation-and-Recitation. This method ought not perhaps to be included among "modern" methods. It is, nevertheless, the "type" which is most common at the present time. And it may be consistent with the new purpose of education.

The recitation mode bases its procedures on the assumption that pupils have their lessons prepared before the class meets. The teacher then has the pupils recite what they have learned. He plans to accomplish by this means several outcomes. By having his pupils recite he hopes to test their preparation to discover pupils' difficulties to be cleared up, to familiarize them with the topics or processes involved, to reward pupils who have learned their lessons well or made outstanding contributions, and to stimulate pupils to further efforts.

The general shortcoming of the typical recitation is its artificiality. Pupils are expected to answer questions, give explanations, and demonstrate solutions, not because the teacher or his fellow pupils are looking to him for information, but because they are alert to discover him making a mistake in what they all know quite as well as, often better than, the poor victim who is reciting. There is, therefore, inherent in the formal recitation a condition which tends to estrange many pupils and teachers, pupils and subjects, and fellow members of the same class. Some pupils do, indeed, respond to this mode eagerly; they like its definiteness; they crave the rewards for docility and adhesive memories. Nevertheless, they are the very pupils most in danger of maladjustment in a world of real responsibilities calling for initiative and self-reliance.

The lesson-preparation-and-recitation mode must, therefore, be enriched by supplementary assignments and diversified projects so that pupils will look within themselves quite as often as in textbooks to discover the appropriate responses. There will be fewer true-false tests and arbitrary rights and wrongs. Rewards will go to those who act independently as well as to those who give verbal memorized answers. For to the significant questions of life, there are no *right or final answers;* there are only honest and well-thought-out tentative conclusions.

The Socialized Recitation and Project Plans. In these methods, the teacher endeavors to reproduce the learning situations typical of social life. Motive is recognized as "half the battle." Hence, the whole class plan is an attempt to lead pupils to undertake eagerly, either as individuals or as groups, the solution of some challenging problem, the creation of some reality, the control of some procedure, the appreciation of some meaningful or significant condition.

If we accept Kilpatrick's criteria of the true project—that it shall involve wholehearted purposing, planning, execution, and evaluation—it is evident that the socialized recitation practically always implies the existence of a project. In other words, the socialized recitation is a normal and desirable method for the group formulation of purposes and plans and for the evaluation of their execution. In such meetings, the teacher counts as one person—a person more experienced than his fellows, to be sure, and, hence, whose opinion may be entitled to more respect than theirs. But he does not settle things out of hand for the class; if he is wise, he may occasionally permit, even encourage, the class to outvote him. In such class meetings, the right ways or right decisions are not the teacher's ends; the honest effort to *discover* what is right or best is of supreme importance. Wrong decisions will quickly show them-

selves up. Majority prejudices will have brief but vain triumphs. Pupils will act against their own better judgment and regret it; they will sulk and find it does not pay; they will abuse their leadership and neglect their responsibilities and suffer the punishments which such dereliction of duty brings upon them.

How shall we judge the value of such procedure? By true-false and multiple-choice tests? Absurd! By their analogy to desirable life situations? This is better, but may be challenged. By seeing the school situation not as like life but as life itself? Surely. The project may thus be self-evaluated.

This basis of values does not preclude objective judgments, though it does make them more difficult to secure. We must first seek tests or measures of social adequacy and then apply them to large numbers of pupils before and after a considerable period of time in which project and socialization have been the predominant methods. As a control, we may utilize similar groups taught by conventional methods.

Such studies have been made. Pickett studied general science in a vocational school. In a four-year high school Frederick studied biology; Hurd, physics; and Kelly, history. Always the traits allied to the objectives of education have shown greater improvement under the purposing plan than under conventional methods. Sometimes, the fact and skill control has been quite as great under the project plan as under conventional methods. The preponderance of evidence at present is, however, that if we want a youngster to control abstract facts and processes for examination purposes at the end of the course or topic, we had better depend on testing, teaching, testing again and adapting instruction, and teaching again, *ad nauseam*. But we have no evidence that, at the end of six months or six years, he will control these facts and skills any better than one who had less mastery at the end of the course. We have, indeed, very definite evidence that he will not.[6]

Individual Methods. The old commercial-college plan, which makes it possible for students to cover ground at different rates according to time and effort spent and which adjusts the exercises for different abilities, was rediscovered a few years ago and renamed "The Dalton Plan." As originally heralded it *caught on* wonderfully well in ground-covering schools, particularly in Europe, where, as Kilpatrick has pointed out, the completion of units of work in preparation for examinations is even more prevalent than in America.

It has the very real advantage of putting responsibility for the completion of work "up to" each pupil. The teacher cannot pass or fail a pupil on the basis of mere opinion. When the pupil has completed the assigned work, he submits the outcome to the teacher who credits him with the fulfillment of the required work. As operated in some schools, the contracts have de-

[6] Mr. Funk compared the results of conventional and of "mastery" techniques; he believes that the following conclusions are justifiable:

(1) Neither of the methods of classroom technique tends to produce better scores in true-false, multiple-response, completion-sentence, application, and organization tests. (2) Pupils can be taught to organize material as well by the day-by-day recitation method as by the mastery-technique method. (3) Pupils taught by the day-by-day method can apply their information as well as can those taught by the mastery-technique method. (4) Pupils taught by the mastery-technique method read more extensively than do those taught by the day-by-day recitation method. (5) Pupils can be aided in the improvement of their reading as much by the day-by-day recitation method as by the mastery-technique method. (6) Pupils taught by the mastery-technique method read a greater number of types of reading material than do those taught by the day-by-day recitation method. (7) The majority of pupils prefer the mastery-technique method.

N. M. Funk, "A Comparative Study of the Results Obtained by the Method of Mastery Technique and the Method of Daily Recitation and Assignment," *School Review*, vol. XXXVI, May, 1928, No. 5, pp. 338-345.

manded such a high degree of reading ability, organizing and abstracting capacity, and interest in traditional culture, that many pupils have been unable or unwilling to complete their asignments. In more humane and democratic schools, however, the gradients of increasing difficulty and abstractness have been adapted to the social and biological inheritances of children. In such schools, the method has lent itself to a true education in responsibility, to the attainment of greater self-confidence, and to the pursuit of happiness.

Somewhat allied to this ground-covering individual plan is that of goals-mastery, best known as the Winnetka method. The Courtis drill exercises also exemplify this plan. Generous shares of each school day are allotted to socialized, experimental education in which spontaneity, pupil enthusiasms, and active eager participation are stressed. At other times, pupils work individually on the mastery of skills and informations for which there seems to be some "scientific" justification.

Pupils thus know the goals which they must achieve and may have the same attitude towards their work as a golfer who wishes to "break a hundred." Pupils who attain these goals by means of hard work or native aptitude are freed from a part of the whole of their daily "stints." Hence, they are encouraged to engage for even more of their time in undertakings which imply purposing, planning, executing, and evaluating.

The Unit Mastery Plans. The best known of these methods are the Morrison unit technique, and Miller's Wisconsin contracts. These units differ from projects in that they are teacher-controlled. They have a concrete and definite character, but they are so organized as to result more specifically in the formulation of principles of knowledge, or the development of more tangible appreciations, habits, and skills. In the Miller plan, school marks are assigned on the basis of progressively difficult contracts: "fair" for the minimum, "good" for the next level, and "excellent" for the highest level. Motivation and careful preparation of the class by the teacher precede each assigned unit.

Individual mastery of these assignments is insisted upon. The methods of procedure, the rate of work, and the level of achievement are adapted, however, to the needs and capacities of individual pupils.

While many pupils find in these units high degrees of self-expression and eager pursuit of knowledge and mastery, the all-important matter of continuing attitudes is lost in the mists of uncertainty. They resist superimposition and uniformity.

In an excellent high school in which the Morrison technique is successfully used, one teacher was an outstanding success in the preparation-test-teach-retest-adapt instruction teach-again and test-again program; another teacher just could not use the technique adequately. He started to teach for one objective and soon found himself and his pupils chasing half a dozen interesting but elusive goals. He himself was very humble under the criticism which came to him; he felt that he merited it. He was a mediocre teacher; as a technician, a failure!

At the end of the summer vacation, one of these two teachers had received over thirty letters from pupils who wished to tell of something they had seen, of collections they were making, of interesting reading they were doing. They asked questions, they advanced hypotheses, they sought advice.

No, it was not the excellent teacher cited above who got these letters; his work had been done, his pupils had mastered their subject matter and probably thanked a kind Providence that they would not have to see, hear, or know anything more of it as long as they lived. It was the "failure," who had given so little of organization and mas-

tery and so much of kindliness and enthusiasm, whose pupils went on with their questions and searchings for answers. Truly the last may be first and the first last when life values are substituted for scholastic values.

Education is not something to be got and certified, and stamped "educated." It is rather a preparation and a prophecy. It is a stimulus, a momentum. That person is educated who is still curious, eager, alert, and growing at thirty, at forty, at fifty, and at sixty.

Hence, education does not consist of, and cannot be measured by, what a boy or girl knows or can do on a certain day in June of his or her senior year in high school—or at any other particular moment. Education consists of his or her will to do, to be, and to control. It depends on his or her readiness to use the tools and procedures with which he or she has practised in connection with school and affiliated educational institutions. For if the mind-set and self-confidence are right, the individual will go right on learning throughout life.

Let our methodology be that of the Danish Folk High School. Let us first be sure of our own enthusiasms for what we would teach. Then with our own personality let us endeavor to enliven our pupils before we attempt to enlighten them. Let us help each child to find a task, to evolve a plan for performing his task, and then permit him freedom to work out his own salvation.

If by our methods we can lead youths to enjoy learning, if the adventure of discovery has an appeal, then will education continue and be coterminous with life.

THE DEMON OF INHIBITION[1]

HUGHES MEARNS

EDITOR'S NOTE: *The leadership of Hughes Mearns in creative education is unchallenged and unchallengeable. Not only an author and creative artist in his own right, he has, for the past quarter of a century, inspired boys and girls to set forth, in forceful and exquisite form, their feelings and their literary and artistic efforts. More than that, he has led teachers to adventure in setting free the creative spirit of youth, not only in literature and drama, but in all art forms. Besides many magazine articles and novels, Mr. Mearns has published* Creative Youth *and* Creative Power.

P. W. L. C.

I

Poetry had broken loose in Caroline Zachry's junior-high-school classes. It was something more than a classroom assignment guided by a sucessful teacher; it was a spontaneous and genuine poetic outburst which really seized the interest of every one. Of course Miss Zachry had laid the long train whose premeditated outcome was this very general explosion.[2] The poetry crop had suddenly burst into bloom; a mimeographed magazine appeared; business managers and editors assumed command. Every member of the junior high school seemed suddenly bitten with the virus of serious poetic composition.

Almost every member. One keen lad remained aloof. With detached humor, noting the excitement about him, he scribbled the first nonsense that came into his head, copied it carefully, and presented it to the youthful editors. To his secret glee they read it and accepted it with enormous seriousness, and the lad went off to have his private laugh.

We learned the details later, so that I should not omit the fact that he had worked

[1] Published by courtesy of Doubleday, Doran and Co.

[2] For a full account see Miss Zachry's *Illustrations of English Work in the Junior High School*, Teachers College Publications, New York City, to which William H. Kilpatrick has contributed a commanding introduction.

a long while over his first rough draft, twisting and turning it this way and that to bring out its delicious silliness; it was really in his mind for several days before he was ready to let it go as a perfected hoax.

On the day the mimeographed magazine came out he watched the absorbed readers. The joke would be on the self-consequential editors this time. In a moment or two, he thought, some one would read his stuff, look up, and laugh. They read, but they did not laugh. They read and they looked over at him, but their glances and their clatter of speech were all of approval for the fine poem he had written! "One of the best things the class has done," was the general verdict. And the teacher agreed with them!

Again he had his private laugh. The joke was now on all of them. Including Miss Zachry. Why, he had scribbled away with hardly a thought in his mind. Poetry! They didn't know the difference between poetry and hash. This whole poetry craze was pure bunk. Oh, listen to them gush! (We heard all these arguments from him later.) He "had" them and he could prove it now (I believe he had admitted one boy into the conspiracy to use as a witness); but their excited admiration of his work was too serious to give him an immediate chance. In fact they took his first protestations as just silly modesty and shut him up.

He read the so-called poem over to himself. He could hardly conceal his desire to laugh in their faces. It had practically no meaning at all! But as the days went by he had to listen to parts that began to be quoted on all sides, lines that readers had relished and must say aloud over and over. One phrase in particular gave great satisfaction; it was repeated openly in the halls as the class skipped along and it was whispered secretly in many a recitation room:

Tum . . . tum . . . tum . . .
On the back of a hollow bamboo drum.

The poem tells the story of Akib, King of Egypt's son, who

Lay by the river Do Dum Dun,
Lay on the gray-green sands
Of Egypt land,
On Egypt's gray-green sand.

As he lazily stretched himself out beneath the oily palm, Akib hummed

a song to the Ukeadahm
Till he fell asleep, in the middle of June,
Singing away to the crocodile's tune,
To the tune of the ugly crocodile
As it beat its tail in the river Nile,
Tum . . . tum . . . tum . . .
On the back of a hollow bamboo drum.

Then follows Akib's dream of the Ukeadahm coming "with stealthy steps and cautious looks, washing his face in the cool of the brooks," . . . "crushing the soil and mashing the sod"

As he sifted the grains through his hoof-like hand,
Sifting the grains
To the wind that blew over Egypt land.

And Akib, the sleeping King of Egypt's son, dreamed that the moon broke out in the sky above

and tossed about
Like a ship on the sea in the trough of the storm,
Fighting the waves as the night went on;
And he saw the moon shiver at the crocodile
As it thumped its tail in the river Nile,
Tum . . . tum . . . tum . . .
On the back of a hollow bamboo drum.

Those who are interested enough to follow the mysteriously uncanny story may find the whole poem in *Creative Youth*. It has taken the fancy of many other boys and girls; they see in it the free play of an astonishingly vivid imaginaiton. That it was done rapidly and without much planning has nothing to do with its value; and that its author thought it worth little is only one more proof that our best work is often not appreciated by ourselves.

The real fun of the episode came when the seniors, looking for material for their printed magazine, fell upon "Akib, King of Egypt's Son" in the mimeographed periodical and gave it two full pages with their hearty endorsement. Now, thought the young author, the laugh is on the whole school; and it was then that he came out with his own story and his statement that they were all fooled.

As Sam was able to convince several others, something like the start of a revolt had burst amid that poetry group. A real fight was on, no doubt. If some one had come along at that moment and proposed a discussion of What is poetry anyway? it would have met with unanimous interest. Intense moments of that sort were characteristic of the atmosphere in Miss Zachry's literary projects. At times nothing in the world seemed to those children of greater importance than the differences of opinion that cropped up naturally out of her work; she is a master in the art of planting materials that seize the whole life of the child. But here she was somewhat fearful that the excitement might become too hot to handle for the right progress of that group along creative lines; so we went into private conference on ways and means of meeting the difficulty to make it tell for the good of all.

In consequence, I was invited to go before the class with my side of the story, in order to prove to that youngster that he had really, if unwittingly, done a superior thing. I read the poem to the eager young people and then explained why we older persons believed that it was one of the outstanding accomplishments of the younger poetry group. It was most amusing to think, as we debated back and forth, that here were two teachers seeking to convince a student that he had done well in his school work, and practically begging him to take a high grade for it! A striking picture out of the new education.

After the reading, a steady and continuous applause came spontaneously from the youngsters, obviously meant for the young author.

I smiled at the youth as the applause continued solemnly. "Doesn't that affect you," I asked him quietly, "their approval?"

He was slumped low in his chair, one elbow on the table in front of him. "Yes," he admitted honestly, "It does. They like it, I guess. You read it—as if it had some sense. But—it hasn't any; no meaning, I mean."

"I agree with you," said I. "But we don't always like a poem for its meaning. The fascinating thing about 'Akib' is its pictures. It is a procession of weird, even grisly pictures. That ugly crocodile! It gives me the shivers. And continues to, long after I have read it. I see him at night

> Tum . . . tum . . . tum . . .
> On the back of a hollow bamboo drum!

Just like 'The Ancient Mariner.' I doubt if anybody really knows what 'The Ancient Mariner' means; I am one of those who believe that even Coleridge, the author, didn't know! But his pictures are enough to give a body delightful and permanent horrors."

Suddenly a large girl rose near him and said, "Sam, you *know* it's good!" and slumped with a bang into her chair. The class applauded again; and that seemed to settle the matter.

II

There is no doubt that something has a grip on our real self. Something there is that does not love our best. Every artist—painter, writer, or fabricator generally—knows about this unseen, unknown enemy; and every artist has at some time or other discovered a trick to throw it off that seemingly eternal guard. Some will smoke endless pipes and pretend to be thinking about nothing at all; and then, presto! they turn suddenly to work and have a lot done before the Thing (who is really a little stu-

pid) can discover what's up. Others walk up and down; or must use a rocking chair; some find places of magic where he cannot always enter—bathtubs, for instance; and there are those who must work in bed (Mark Twain was one of these); or go hiking; or, like Mary Roberts Rinehart, take an office in town away from any suggestion of normal living.

Hours are important, too. Some cannot work until after midnight. Others begin at dawn.

Sam's "Akib, King of Egypt's Son" is, I believe, an instance of an unconscious scheme to divert the creative inhibitions. He thought he was only fooling but he succeeded in fooling himself. If he had seriously attempted to write, the chances are that he would have had to struggle, and then, in all likelihood, his free-flowing imaginative pictures would not have been forthcoming at all. Not to try is one of the ways of succeeding in the creative field. It is not the only way, of course.

Not to try! How the creative life fights all the precepts of the virtuous ones! The good little boy is one who gets up at an exact hour, does always what he is told, listens to others and disregards any promptings of thinking that might suggest themselves from within, strives all the time to do his best, never loafs, eats his meals on time, including two hundred calories of spinach, never speaks unless spoken to, assumes an interest in everything worthy, prepares all his lessons with exactly equal interest in each, and goes to bed on the dot without a single original human whine.

The picture suggests clockwork. Well, we elders have tried our best, for our own comfort largely, to arrange a world with only this sort of youth in it; but our success, if any, was only with the uncreative; our failures were with those self-assertive rebels struggling to be free spirits. My own belief is that we should not have failed if we had had a better understanding of their unclock-like make-up.

III

My belief is that our serious consideration of Sam's creative ability brought to him a practical knowledge of the workings of his own mind. If that is true then it was one of the best pieces of teaching that the school did for him. We noted that he wrote a considerable amount of material, very little of which he permitted us to see; undoubtedly he got a deal of personal satisfaction out of these scribbling reproductions of the figures in his mind.

Religious experiences absorbed him at one later period; not that he said anything about it; we learned it from others. He wrote a great deal at that time. Obviously the stark reality of Judgment Day had worked upon his imagination, for among the very few contributions that he permitted to circulate was one on that theme. I give it in these pages, to show that we were not wrong in attributing to him a strikingly imaginative personality with a gift for condensed and pictured language:

THE COMING OF THE LORD

I

The clouds broke forth
In a mighty ray
Lighting the glory
Of the new-come day.
Angels chanted
And people cheered,
The cattle ran
And the horses reared.
All was havoc
In hell-like fire,
And the old cross glowed
On the steeple spire,
While all around
Grew fiery red
With sparks and lightning
And thunder dread.

II

Christ stepped out
On a crimson cloud
Amidst a roaring
Shouting crowd,
With an ivory crown

And a love-worn face
And a bleeding heart
Of flowing grace.

III

The Devil peeked out
Of a corner cloud
And grinned at the Lord
And mockingly bowed.
And the people yelled
Like a braying bull:
"Begone, you devil!
You goat-horned fool!
Begone to your hell,
Your brimstone and fire!"
And the old cross glowed
On the steeple spire.

IV

Then rich men rushed
To their hidden wealth,
And drunkards drank
To the foul fiend's health.
Some were afraid
And tore their hair,
Doing penance for sin
While full unaware
How beside the cot
Of each good man,
An angel played
On the pipes of Pan.

V

Of a sudden the saints
In double pairs
Came riding forth
On brown-gray mares.
Onward, forward,
All day they marched,
O'er the burnt-up earth
Forever parched.
Up the golden ladder!
Through the golden gate!
Others followed after
But were too late.

VI

The earth, shriveled up,
Went hurling through space . . . .
The Lord had come and gone in His grace.

CLASSROOM PROCEDURES IN TEACHING INDUSTRIAL ARTS

G. K. WAGAR

EDITOR'S NOTE: *Garton Wagar is Director of Industrial Education and Vocational Guidance of Industrial Pupils in New Rochelle, New York. He has been a constant and intelligent advocate of liberal methods in education.*

A. D. W.

FIVE ILLUSTRATIVE PROCEDURES

Many teachers of industrial arts have accepted the educational principle that "pupils learn to do by doing." The pupils are guided into participation in selected activities. Through such participation, it is claimed that the pupils obtain a concrete basis for thinking about form, texture, color, weight, use, value, etc. It is believed that common sense in thinking comes from experience or contact with actual situations. Hence, the teacher of industrial arts tries to set up as many life situations as possible. It is hoped that these situations will give opportunity to the pupils to respond in desirable ways and thereby form habits which will enable them to meet similar life situations with intelligence and common sense. It is further conceived that judgment can be acquired through actual application in working out a solution of a problem. Briefly, industrial-arts activities are supposed to afford opportunity for thinking through life situations and for proving or testing the accuracy of such thinking.

Industrial-arts activities furnish opportunity for learning by responding to stimuli through all the sensory channels. Vicarious experiences are of minimum use as an aid in solving concrete problems. A maximum use is made of first-hand experiences. Since a large part of life's problems are made up of concrete situations, industrial-arts education is of great importance in the lives of pupils. It is not the purpose of this short article to prove or disprove the

correctness of the above principles and conceptions. They have been accepted as mostly true by a large number of industrial-arts teachers. Therefore, it will be necessary to keep them in mind when judging whether or not the following procedures in industrial-arts activities are in accord with these principles. This article is supposed to refer only to secondary schools. But, if we would understand the procedures in the secondary schools, it becomes necessary to take a glimpse at the elementary industrial-arts activities.

First procedure. A shop in an elementary school which serves boys and girls from the kindergarten to the sixth grade, inclusive. The boys and girls are studying about farm life in the United States, France, Italy, or in the country of "Anywhere." The boys and girls select the locations for the buildings on the farm, which is laid out in miniature on a table. The different fields are laid out with the idea of choosing the best locations for the raising of the different kinds of produce, for pasture, etc. The style of house, barn, and out-buildings are decided upon. The landscaping is given consideration. The boys plan and make the buildings and equipment as men usually do. The girls take care of the women's work. There is not space in this article to go into the detailed workings of this project, or of projects involving the lumbering, fishing, manufacturing, etc., of different countries. Enough has been said to give a picture of the class procedure in an elementary industrial-arts shop. It is evident that the teacher of industrial arts must coöperate with the other teachers and understand the work done by these teachers in the elementary grades. Likewise, all the teachers must coöperate with the industrial-arts teacher.

Second procedure. A shop in a junior high school. The shop serves the seventh grade, or first-year boys. The purpose of the activities in this shop is to teach the boys handyman abilities, desirable attitudes as members of the home, and a minimum of industrial skills, techniques, and knowledge. The boys read gas meters and electric meters and make computations based on such readings. They remove a broken pane of glass, measure the opening, and glaze it. They repair leaking faucets. They do many jobs of this nature that are found in the homes of the community. A record is made of each job done by each pupil. The boys take turns in caring for the tool room and in checking up tools. They report on handyman jobs done at home. The boys work from instruction sheets for most jobs. The teacher lectures on safety and health precautions in the home and the shop, demonstrates tool processes and methods of construction, and points out ways of doing desirable jobs about the home and the school.

Third procedure. A woodworking shop in a junior high school. The shop serves second-year "industrial" boys. The supervisor of art needs ninety-three easels for art work in the elementary grades. The "industrial" group in woodworking has been given the job. Throughout the activities, the teacher must be thought of as the "big boss" or "super." The boys read the drawings of the job and list the members or parts. The size and layout of each member is decided upon and carefully checked. Three departments are organized: milling, assembling, and finishing. Three of the best mechanics are appointed as foremen of these departments. Jigs are designed and made so that the parts must be all the same when they are finished. The factory starts operations. The milled parts are inspected and checked and are then sent to the assembly department. The parts are assembled, the assembled jobs are inspected, and they are sent to the finishing department, where they are sprayed with duco, inspected, and tagged for shipment to the various schools.

Fourth procedure. A woodworking shop in a junior high school. The shop serves the academic eighth-grade boys. In display cabinets and elsewhere about the shop and finishing room are exhibited a number of finished projects or pieces of work. Each pupil is required to make at least one of these projects. To make any one of them demands the achievement of certain skills, techniques, judgment in the working and finishing of wood, and ability to work from drawings and specifications. Each pupil is allowed, upon completion of the required project, to select another in which he is specially interested. Each pupil is required to make a working sketch of the project he selects. He makes out his mill bill and a list of hardware and finishing material. He plans the order of operations. He checks up with the teacher and then begins work. The boys take care of the tool room and equipment. A progress chart is kept so that each boy knows exactly where he stands in relation to the rest of the group. These pupils must take twenty hours of shop and may elect to take fifty hours.

The electric shop, machine shop, auto-repair shop, etc., are handled in approximately the same way. The ninth-, tenth-, eleventh-, and twelfth-year shopwork is elective except with industrial groups. The ninth-year electives are allowed to take twenty weeks or one hundred hours in one shop. The projects are mostly selected by the pupils according to their interests. The tenth-, eleventh-, and twelfth-year elective pupils must spend two hours a day for forty weeks in the shop elected. The procedure is similar to that of the ninth-year elective group. Space permits of giving the procedure in one more shop caring for a technical group in the eleventh year.

Fifth procedure. A technical group in the eleventh year of a general high school. These boys intend to go to college and enter an engineering course. The pupils are first taken to the drafting room. They design a piece of equipment that is made of cast iron. They make to scale detailed and assembled drawings. They make tracings of these drawings. They make blueprints from these tracings on blueprint paper which they have sensitized. Then they go to the woodworking shop. They work from their blueprints and make patterns. These patterns are sent to a foundry and the castings are made from the best of the patterns. The foundry work is done outside as there is no foundry in the school. Nevertheless, the pupils perform all of the foundry operations except the pouring of the metal. These operations are taught during the time the castings are being made. When the castings have come, the pupils are taken to the machine shop. There they mill and machine the castings. The parts are then assembled into the completed job. If there are any electrical machines to be attached, the pupils go to the electric shop for this part of the work.

It would seem that all the class procedures described afford opportunities to the pupils for acquiring a limited set of skills, techniques, and knowledges which can be used to advantage in life situations. It would seem, also, that opportunity is given for thinking through concrete problematic situations in which the use of common sense or judgment is necessary.

PROBLEMS THAT BOTHER ME

CHARLES M. GILL

EDITOR'S NOTE: *Charles Mark Gill, professor of education in the School of Education of New York University, has had wide experience in public-school administration. He lays before us, in the following article, a very urgent plea for help on the part of a teacher whose desire to act as real educational guide to her pupils is hampered by some obstacles which most readers will recognize.* A.D.W.

A thoughtful, conscientious, experienced teacher and student in a school of education lays the following teaching situation before her instructor, not for intellectual gymnastics but for practical answers that will help.

I have an 8B class—register 33—20 boys and 13 girls. Thirteen of the 33 have I. Q.'s over 100; 15 are in the 70's and 80's; 8 of the boys are overage pupils that have been discipline cases for years.

The history course of study covers the period from the end of the Civil War through the present. The final examinations, however, always cover periods of exploration, discovery, colonization, revolutionary period, and the period between 1789 and 1865 as well as the work listed for the 8B. Our grade work is the covering by topics of such subjects as slavery, tariff, Monroe Doctrine and its applications; our monetary system including study of the Federal Reserve System; political parties; suffrage; civil service—and the like. We have three forty-minute history periods a week; a textbook, *A History of the United States*, by Thwaites and Kendall that is beyond the understanding of my present class; one forty-minute Constitution period, and one forty-minute current-events period.

At the beginning of the sixteenth week, our 8B work must have been completed, the marks in the district superintendent's office, and the names of candidates for the high schools with courses chosen by them in the hands of the respective high schools. In order to graduate, pupils must get sixty-five per cent in all major subjects. We have separate tests in geography, history, constitution, and current events.

Problem: Shall I teach a few of the required topics, or shall I try to touch on all? Shall I take time to get the expressed opinion of these 70 I. Q.'s who are record trouble makers and bend my energies to getting them to see the necessity of law and their obligation to obey it? Just how can I guide this type of boy, who is in school only because the law compels him to be there? How can I change his viewpoint on obedience of law and order, teach him enough facts, and drill him on them often enough for his intelligence to get them—at least sixty-five per cent of them?

Society is concerned about the present and future social behavior of school children. There is much doubt whether the billion or so of dollars that it is spending on schools is producing what it wants for "all the children of all the people," or all that it wants for any of them. Administrators and teachers are commissioned and paid to attain the objectives that society wants attained and find ways to attain them, or advise, as experts, changes in objectives. The situation sketched by this teacher cries aloud that some things are getting between society and what it wants.

Would you tell this teacher that she is right in her inference that the "system" and the administration are responsible for her dilemma? Would you assure her that her aim—citizenship behavior—is society's objective and that her system's objective—memory of facts—is not? Would you point out that whatever the attainments to be tried for may be on paper, the real ones are those on which promotions are made? Would you agree with her that the ability to write from memory sixty-five per cent of a selected number of facts, or all of these facts sixty-five per cent correct, is little value for a big price?

Would you remind her that compulsory attendance at school is society's attempt to give the schools a chance to train all the children for worthy living? Would you add that the school with all its records and I. Q.'s furnishes opportunities as though all children were exactly alike? Would you

express the conviction that no group of children, all of whom are dull and some nearly feeble-minded, should be forced to study the abstract facts of the Tariff, Monroe Doctrine, Federal Reserve System, and the Constitution until they can say the right words when the cue is given? Would you tell her that a course for such children should deal with the concrete phases of national life and ideals that can influence attitudes and action as a good citizen in school and out? Would you confess that we have few such courses and no textbooks suited to dull pupils?

Would you characterize the mandate to "cover" all the selected topics in fear of examination as a curse on good teaching? Would you assert that knowing a few things in their relations is worth more than "knowing about" many things? Would you recall the old alibis of overcrowded schools, insufficient revenues, etc., etc.? Would you point out that they would not risk giving to any but a strong and versatile teacher fifteen slow pupils, some nearly feeble-minded and eight of them chronic trouble makers? Would you add (what she probably suspects) that concern is with having them where they will give the least trouble to "the office"?

Would all this shifting of blame relieve her emotions and not her dilemma? Would it give her an alibi but no assistance? Would you recommend that she select concrete, specific life-situations; e.g., the life of all the people under the slavery system, good features and bad, with some simple judgment problems; that she have some projects adopted and worked out; that she use subject matter of even the sixth-grade level and much graphic description, and then "coach and drill" on examination material to save her children and her reputation? Would you point out that "trouble makers" show initiative and some energy which might be guided into jobs that would relieve the boredom of the fact grind? Would you suggest that right opinions help and are very necessary, but that changes in attitude and behavior come about more often through responsibilities accepted in activities that to them seem worth while? Would you advise ingenious, friendly efforts to find out individual interests, ambitions, and ideals for leads in planning treatment? Would you advise her to get acquainted with the best of the practices and the spirit of the junior high schools? Or would you advise her to seek a position where her "superiors" put children's individual needs before system, and when system interferes with meeting these needs, scrap the system and build a new one?

SELF-SUPERVISION IN FRENCH

BESSIE WOLFNER

EDITOR'S NOTE: *Miss Wolfner is head of the French department of the high school at University City, Missouri. She has had varied experience as a high-school and college teacher of French and is now completing her work for the master's degree at New York University.* F. E. L.

If there is anything which is bothering a student, he will naturally feel more like asking about it if he can ask the teacher privately. He is not afraid of asking some *dumb* question for which he would be ridiculed by the class.

This method is more interesting and things that are interesting are more easily studied and grasped.

One benefit of individual instruction is in the case of illness. If a person is absent for a week, he may be able to understand the work by going into the group he needs.

There is an incentive—that of keeping in the group ahead.

In other classes I feel sometimes as if I am being pulled along by the rest of the class and sometimes as if I am waiting for the others and being held back.

We cover more ground and more thoroughly.

Our class is most enjoyable under this method.

A pupil may advance as rapidly as his intellect and application enable him to do. Under the present method, no time is wasted by drilling the pupil on subject matter which he has already grasped. Each one is permitted to drill on that part which is most difficult for him, not the majority of the class.

The statements just quoted have been taken from the comments of students at the end of an experiment in the learning of French held in the high school of University City, Missouri, during the school year 1928-1929.

The experiment was based upon the theory that the function, principles, and factors of supervision are applicable to the teacher-pupil relationship. The teacher played a dual rôle. (1) She acted as teacher, and, in this capacity, needed to be cognizant of the learner's equipment and the methods best suited to enable him to achieve the objectives of the course. (2) She assumed the duties of the supervisor and in this capacity had to be aware of the teacher's problem as well as that of the learner. She was expected to suggest changes or offer criticism for the improvement of instruction. In this case, it was to be a matter of teacher-supervisor criticism of the student's work in connection with self-supervision on the part of the teacher-supervisor.

Furthermore, it was felt that self-supervision, together with the idea of participation in the enterprise, might be developed in the high-school student as it is developed to a greater extent in the teacher.

Another feature of the experiment was an attempt to discover whether instruction by an individual method would result in correspondingly greater accomplishment by the students of greater ability. While no true comparison of the accomplishment by the individual and unified class systems of instruction was possible under the conditions provided for the experiment, there was sufficient evidence to warrant a correlation between the intelligence quotients of the students and their accomplishment under the individual method.

These considerations, together with specific objectives of the course in elementary French, served as the motives of the experiment.

The high school in which the experiment was conducted is a senior high school of five-hundred students located in a rapidly growing residential city of more than 35,000 population just west of St. Louis. The vast majority of the students come from good homes, practically all are American born, most of them the children of American-born parents. Most of the students have no sacrifice to make in order to remain in school. They take their courses of study, their student activities rather for granted; yet, they exhibit a desire to coöperate in any worth-while enterprise, reliability, initiative, willingness to accept responsibility, and more than average ability to carry school work.

Most of the members of the two classes in elementary French designated for this project were located in the tenth and eleventh grades. In age, they ranged from fourteen to eighteen years, and in intelligence (Terman test) from 84 to 124. The median intelligence quotient in section A was 107 and that of section B, 106. The classes were unsectioned. At the end of the year, section A had twenty-six members and section B, twenty-one.

One important phase of our problem was to see how much freedom for development would be possible within a class following a prescribed course of study with a uniform indirect method text, in a formal classroom, and all within the rigid high-school period of forty minutes. My associate and I divided the two groups between us. We coöperated throughout the year, adopting similar standards of measurement and preparing together the informal, semiobjective tests, given as a means of permitting each student to take stock of his work.

During the first part of the first semester, each class was carried on as a unit. Work in pronunciation was emphasized, a little elementary conversation was carried on, and students were made familiar with French terms. At the end of the preliminary period, it was suggested to some students that the character of their work warranted their continuing more rapidly. They were urged to read stories in French books found on the class tables or library shelves. Other members were advised to pause for review before going on to new work. It was explained that there would be no penalty for working more slowly. Each would be expected to utilize the class period to advantage. Every one was urged to progress as rapidly as possible without causing the quality of his work to fall below his own standard. No attempt was made to use a contract system, but the minimum assignment for the entire semester was announced.

Several members had soon completed assignments in advance and had short stories to their credit. This group remained ahead during the remainder of the year and proved of help to others in explaining difficult points. This group often work together on material prepared outside of class, discussing constructions and requiring of each other real opinions and reasons for the explanations offered. Whenever the teacher's presence was requested, she was there as supervisor "on call." Students tried to understand new work before asking questions. While this group was meeting, others were working on a different set of lessons, or engaged in reading a story. Members who had been absent would present for the supervisor's approval work which they had undertaken alone. Still others were engaged in taking a test or in preparation of advance work.

Since more than twenty-five high-school boys and girls were participatnig in this moving picture, it may seem that confusion must be the price of so much freedom of motion, if not in the course of study. At no time was the room really noisy; neither was it often silent.

This plan necessitated a system of testing and checking if each student was to progress at his own speed with supervision in proportion to his ability to criticize his own work. A unit system was established arbitrarily as a basis for assigning credit for satisfactory work. An attempt was made to evaluate each part of the work in comparison with every other part. One lesson satisfactorily prepared was worth 2 units. Each of the informal tests taken was assigned 0, 2, 6, 10, or 14 units according to quality. Each student was required to earn 10 units, the equivalent of a B grade, in each test before proceeding to the next portion of the work. He was permitted to repeat a test until he had earned 10 units, but no student required to repeat one was allowed to receive more than 10. Quarterly tests, required by the school, were also administered and were assigned units in proportion to the importance of the test. For oral participation in class discussion, coaching, dictation, acting as group leader, and comprehension of stories read, the series of units ranged from 0 to 100. Final examination grades were also translated into units, on the same scale used for oral participation.

A chart was kept by the supervisor with the assistance of a class chairman, showing the accomplishment of each student along various lines. Class and home-preparation units were recorded in blue, all tests in red, and extra work of any kind in green. This enabled each student to tell at any time the amount of work he had completed, judge for himself the amount of each type of work which remained for him to do, and budget his time accordingly.

Frequent conferences for guidance and criticism were held between the teacher-supervisor and students at the request of either.

Conformity to school regulations in preparing students' report cards necessitated the use of a formula for the translation of grades according to the experimental terms into terms of school grades for each quarter. At the same time a graph was kept showing the students' progress in terms of units. The total number of units earned was the sum of all units obtained for the five weeks.

The opportunity for each student to compare his achievement graphically with the efforts of others served as an incentive to many and seemed not to discourage others, who were unable to progress so rapidly.

The question of preparedness for tests rested entirely with the students, who requested tests whenever they felt ready to take them. Those desiring tests were asked to come early and to group themselves so as to cause a minimum of confusion at the beginning of the period and to ensure their having ample time to complete the tests. Mimeographed copies of all tests were always available for the chairman to distribute. While these tests were based primarily upon a group of lessons in the text, some review was included in each.

Standardized tests (Terman Group Test of Mental Ability—Form B and American Council Alpha French Test—Form A) were administered to check the results of the experiment, and to help in the formation of conclusions concerning the validity of the procedure employed.

A high correlation was found to exist between the intelligence quotient and the number of units earned (+.553) and between the intelligence quotient and class grades assigned (+.591).

The results in the American Council Tests were as follows: Not quite one half of section A reached the normal line in the vocabulary test, though eight members of the class exceeded it. All but nine members reached the norm for the grammar test, while sixteen surpassed it. In the silent-reading test, fourteen members equaled or surpassed the norm, while four others were practically normal. In the composition test, not one was below the council median score, while all but two excelled in this test. The results in section B were similar to these.

The implication is that these classes possess a superior knowledge of exact composition as evidenced in their responses to the grammatical question, a little more than average ability to comprehend French at sight, and superior ability to express their own ideas in free composition. If one of the chief objectives of this individual method is to enable students to understand French and to express their own thoughts, this would tend to indicate that the method, at least in this instance, was valid.

As a final step in the experiment, the students were asked to express their opinions concerning the two ways in which they had studied French during the year. The following questionnaire was submitted to both classes:

1. Do you like the method of individual instruction you have been following this year better than general class work? (Class work means keeping the entire class on the same assignment, as we did in the beginning.)
2. Do you think you have learned more by this method or the old one?
3. Would you like to continue something of the same kind in French 3 next year?
4. Do you believe that most of the work has been honestly and conscientiously done?
5. Give any constructive suggestions you can for a similar course in French 1 and 2 for next year. (Things you would have found helpful.)

A number of good suggestions were included in the answers to this question, and some interesting reasons for the answers to questions 1 and 2. The quotations at the beginning of this article were selected from these comments.

Practically all students felt that they had benefited by the system, though there was a little adverse criticism, some of it well founded. Their comments showed an appreciation of the importance of interest,

drill, and individual differences in learning.

Certain questions presented themselves for our consideration: Would it be desirable to make the tests altogether objective, even if it were possible? Is the lack of more time for conversation in the first year a real disadvantage, or is the acquisition of fundamental tools of the languages sufficient compensation for this lack? Is it possible to discover a way of testing oral ability in an objective, scientific way? Could the system of checking tests be simplified by utilizing more fully the help of student assistants?

Some of these were answered in part by the results of the standardized tests. If students had suffered by the lack of experience in class reading, this was not evident in the test of silent reading. Moreover, their active vocabularies and ability in free composition were much above the average. The superiority of the classes in the grammar test was not considered an undesirable outcome, since there was no evidence that other phases of the work had been neglected, or that too much formal grammar had been forced upon the group, although we felt that it would be simpler to decrease the overdose than to supply the lack later, or continue the work on an uncertain foundation.

The question of feasibility is one which was asked throughout the experiment. The results seem to indicate that it was not only feasible, but expedient. As might be expected, the need for differentiation to meet the needs of individual students increased as the experiment progressed. In terms of units earned during the second semester, the median in section A was 497. The number earned by individual students ranged from 96 to 898. With greater freedom, the maximum would probably have been even higher. How utterly impossible it would have been to keep all these students interested in the same daily assignment!

In this experiment, the supervisor's objectives were applied to the classroom situation; standards were set up; teaching and learning situations were analyzed; a system of measurement of the results of instruction were followed; an effort was made to discover the methods of work best suited to individual students and to secure the effective use of these methods; direct and indirect responsibility was assumed for training members of the group and for keeping them up to standard qualifications of the group during service; every available means was employed to assist members in gaining knowledge of the work to be done, the goals to be reached, the methods to be employed, the materials and means to be used. Above all an effort was made to see that efficiency, both measurable and unmeasurable, should count for as much as possible in the right education of the group and as a desirable influence in the class and school community, by means of developing self-reliance, independence, and self-supervision on the part of students, rather than a submissive attitude which waits always to be directed. Irrespective of other desirable results, our experiment has justified itself as a valuable lesson in the development of student initiative.

PROGRESSIVE METHODS IN THE TEACHING OF ELEMENTARY BUSINESS TRAINING

BERNARD E. LAVIGNE

EDITOR'S NOTE: *Bernard E. LaVigne is in charge of business branches in the Hillside Junior High School in Montclair, New Jersey. He presents in the following article a set of suggestions for giving pupils specific practice in the formation of desirable habits, attitudes, and skills.* A. D. W.

"It is impracticable to lay down one method of teaching elementary business training and say, 'This should be the manner in which this subject should be taught.' It is the contention of the authors that there is no one best method that can be applied to all student-learning situations. The best method for any particular student is that method which instills in him the desire for self-inquiry and which guides him in making successful use of the things that he learns."[1]

To determine the "best method" for any individual pupil or for a class group, the teacher of elementary business training must select his mode of presenting the subject matter from a varied array of methods all of which are labeled "progressive." This selective process is without a doubt one of the most vital and interesting problems confronting the teacher of the subject. Clearly he will want to select the methods which give the pupils the greatest chance to succeed, rather than the methods by which the pupils are most likely to fail. How then, will the progressive teacher select his methods?

He must first analyze his situation in order to formulate an exact and concise definition of the problem which he "feels" requires solving. His next step will be the collecting of the pertinent subject matter that will help him in solving the problem. He will scan textbooks, syllabi, books, and articles on methods, and any other references which discuss procedures in elementary business training in order to become familiar with all of the methods in the field. Then his problem will be divided into its elements or component parts and a method or a combination of methods will be assigned to each subdivision of the problem. The suggested methods will then be tried and verified to see if they work. If they are not satisfactory, they may be modified or other methods may be tried until a combination is found that is suitable.

Several years ago, when we were attempting to weave method into the elementary business training syllabus for the junior high schools of Montclair, we adopted the procedure outlined. In breaking up the content of the course into elementary units, we were able to find no better analysis of what comprised the elements or component parts of the subject than the following:[2]

(1) Narrow skills and habits, and the association of relatively isolated symbols with meanings

(2) Organized knowledge

(3) Habits of study, habits of thinking, and habits of investigation

(4) Appreciations, aspirations, and ideals

Using this analysis as a guide, we attempted to classify the content of the course into skills, habits, organized knowledge, appreciations, ideals, etc., and to set up methods which would guide and in a sense control the activities of the teacher and the pupils in their attempt to attain these various ends of instruction.

[1] Lomax and Haynes, *Problems of Teaching Elementary Business Training*, p. 129 (New York: Prentice-Hall Inc., 1929).

[2] Chapman and Counts, *Principles of Education*, p. 543 (Houghton Mifflin Company, 1924).

Our analysis was not a clean-cut classification of the content of the course. There was much overlapping as it can easily be seen that one activity could be placed under several of the above headings. However, the classification did serve as a guide to the teacher in analyzing his work presented from day to day. The plan also suggested methods which could be adopted or adapted by him in the presentation of his daily lessons.

Our discussion of methods follows the plan outlined above. The divisions are numbered to correspond with those in the analysis.

TEACHING NARROW SKILLS AND HABITS

In teaching any specific skill in elementary business training, the function of the teacher is to present a suitable copy or model and to supervise the pupils in their practice. If the skill is very simple, economical learning will take place through a systematic copying of the model. However, if the responses to be learned are at all complicated, the teacher should analyze the components of the skill and make the pupil conscious of the difficulties in the situation. This step is necessary to take the procedure out of the blind trial-and-error method of learning and to conserve the time and effort of the pupils. It also lets the pupil know exactly what he is doing and why drill on the subject matter is necessary.

As soon as a degree of skill is acquired in the simpler processes, the pupil should be made to feel that the process learned will function in his daily activities. In the more difficult processes, the functional aspect of the skills should be revealed while they are being acquired. When skills are presented informally, care should be exercised in order that they may not be slighted. The tendency is to pursue the more interesting aspects of the situation, and to neglect the drill work. Although the tools of knowledge may be acquired incidentally in connection with activities performed by the pupils, the best results are obtained when skills and habits are recognized as such and a method of instruction to teach them effectively and economically is adopted. Combining skills with pupil activities will do much to motivate drill, but the teacher should recognize the skill and habit elements in the situation and see that the pupils perform them with readiness and care.

TEACHING AND ORGANIZED KNOWLEDGE

A great deal of the material in elementary business training should be reorganized for class presentation. The content of texts, syllabi, and other references is for the most part arranged logically; that is, logically to the mind of the adult. Before it can be understood by the adolescent boy or girl in the junior high school, many chinks must be filled in with experiences and experiments on the level of the pupil's thinking and understanding. The everyday activities of the boys and girls should be utilized to make the subject matter clear. They afford many opportunities for business practice and can be used to motivate the work and to make it intelligible to the pupils. Including the everyday activities of the pupils in the content also tends to give them confidence in their ability to do the work. They see that economic activities make up a large part of their everyday living and they realize that the subject is not foreign to their interests but that it plays a vital part in meeting their present needs. If organized knowledge is presented largely through situations within the experiences of the boys and girls and its functional aspect is stressed, it will be more easily understood and appreciated by them.

The following list of activities in which the pupil participates in his school life, together with suggestions regarding procedure, will reveal many possibilities through which the teacher may make elementary

business training vital in meeting the present needs of the boys and girls:[3]

1. The business life of the school

Aim: To show the pupil the opportunities for business training provided through the activities of the school.

a Discuss the various activities of the school in which the pupil participates.

b Outline the possibilities for training in business practice afforded through:

(1) The session (home) room
(2) The classroom
(3) The recreational activities
  a Assemblies
  b Athletics
  c Social functions
(4) The lunchroom
(5) The clubs and pupil organizations
(6) The school paper
(7) The bookstore or supply room
(8) The school bank

c Provide the pupils with a plan similar to the following for analyzing the different phases of school life referred to:

(1) How are you making use of the services provided by the activity under discussion?

(2) Organization
  a What is the plan of organization?
  b Personnel (Who are the people connected with the activity and what positions do they fill?)
  c What goods are handled and what serves are rendered through the activity?
  d How is the activity financed?
  e What records are kept? Why are they kept?
  f History and development (When was the activity organized? Has the plan of organization undergone any changes?)
  d Make simple charts showing the present organization of the activities studied.

Definite references should be given if the plan outlined above is to be used successfully. In its use, the function of the teacher is to guide the pupils in their search for material pertinent to the solution of the problems. For a time, the pupils may also need guidance in organizing the material collected for their notebooks. This procedure places the work on an elementary-research basis. In their search for the best means of solving the problems, the pupils tend to form habits of clear, logical, and constructive thinking. To develop this ability to think clearly, logically, and constructively is the ultimate goal of education. When a teacher uses an abundance of problems in presenting the work in elementary business training, it is a good indication that his methods are in harmony with the ideals of progressive education.

TEACHING HABITS OF STUDY, HABITS OF THINKING, AND HABITS OF INVESTIGATION

We believe that the method of presenting the subject matter is the most important factor in determining the habits of study, habits of thinking, and the habits of investigation formed by the pupils. Frequently the method used by the teacher in presenting the material will become the method used by the pupils in acquiring knowledge. If we wish the pupils to learn correct habits of thinking, we must use a method which will provide them with practice in thinking. As thinking always involves a problem and an effort to solve it, the work in elementary-business practice should be presented on a problem-solving basis if the habits listed are

[3] Adapted from the "Tentative Course of Study in Junior High School Commerce," Montclair, N. J., p. 2.

to be developed. The discussion indicates the following means of presenting the work:

a The project method
b The laboratory method
c The problem method
d The research method

Fundamentally the methods are very similar. Their basic unit is the problem and their aim is to stimulate and guide pupil learning through a reflective thinking process. In following the procedure suggested in any of these methods, the teacher should use great care in eliminating those activities which are irrelevant or which are not productive of educational growth. A daily assignment sheet affords one of the most economical ways of defining a problem and of guiding the pupils' reactions in solving it.

An illustration of the question method of making the assignment will indicate the procedure. The project from which it is taken has been frequently used at the Hillside Junior High School, Montclair. Each year the classes in elementary business training organize the student body for the sale of tickets to the operetta and they manage all of the activities incidental to the sale of tickets to a school function by means of the plan.[4]

Homework Assignment No. 1

1. How can we organize the student body so that the tickets will be handled efficiently and sold quickly?
2. Some of the factors to be considered in the organization:
   a Do we want a daily check of the sale of tickets?
   b Should a small group be responsible for the giving out and the checking on all tickets distributed? Why?
   c What are we going to do in case a pupil loses tickets?
   d How large a sales force shall we have?
   e Would it be fair to exclude any pupils who want to sell?
   f Can we make use of the session-room organization in our plan?
3. Show in the form of a chart your plan of organization.

References:

Read chapter 16 in Brewer and Hurlbut—pages 168-173.
See page 125 in the same text.
Pages 154-158-159-160 in Kirk and Waesche.

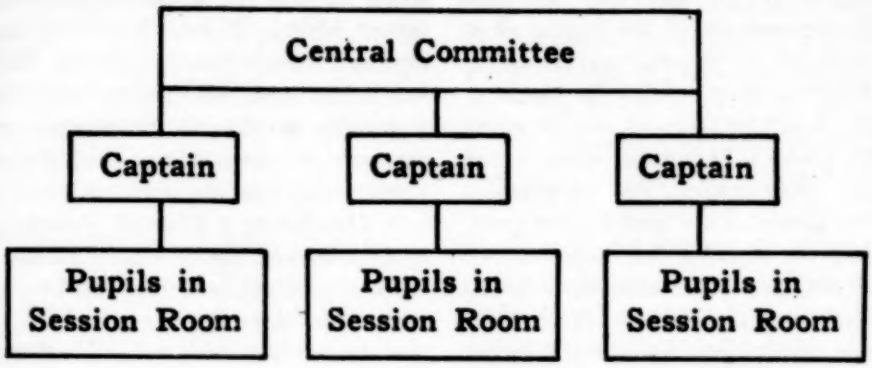
In class tomorrow we will select the best ideas given in answer to number 3 and show an organization chart on the board.

This procedure is suggested for the following class meeting:

1. A ten- or fifteen-minute discussion of the problem. The ideas suggested in the questions should serve as guides in the discussion and should limit the amount of talking done by the pupils. Unless the teacher is alert in directing the project method, the time is apt to be used in discussion rather than in practice. The aim in discussion is to establish a common point of view relative to the ideas suggested in the problem. When this is done, practice work should begin.
2. Save one blackboard in the front of the room and ask pupils to place their charts on the remaining boards.
3. Check the charts rapidly, noting the points of similarity.
4. On the board that was saved, assist a pupil in drawing a master chart incorporating the best ideas from the other charts.
5. Outline the duties of the pupils who take part in the sale of tickets. The illustration gives the form which the master chart and the outline of duties may assume.

[4] The complete project is given in the "Course of Study in Elementary Business Training." State of New Jersey, pp. 33-41, Department of Public Instruction, Trenton, and in Lomax and Haynes, *Problems of Teaching Elementary Business Training*, pp. 144-152 (Prentice-Hall, Inc., 1929).

CHART SHOWING THE ORGANIZATION OF THE PUPILS FOR THE SALE OF OPERETTA TICKETS



Central Committee—Four members elected from the elementary business training classes and the commercial teacher

Duties—To take charge of the distribution of tickets

To receive money from captains

To keep a record of daily receipts of cash

To give these figures to the class for graph work

Session-Room Organization—Captains elected by members of the room

Duties—To keep a record of all tickets received

To keep a record of all tickets given out in his room

To keep a record of all money received from pupils

To turn in the receipts of the room each day

To return to central committee all tickets unsold

Pupils—Receive tickets of captains only

Responsible to captain for tickets received

Turn in money to captain each day.

Captains report to central committee daily at 12.50 to 1 p. m.

6. Distribute Homework Assignment Sheet No. 2

Whenever possible the assignment should be duplicated on notebook paper. The sheets may then be incorporated into the notebooks of the pupils and they will serve as guides in the collection and organization of the material. Moreover, if the teacher consciously plans to use the steps in the scientific or reflective thinking process in making his assignments and in guiding the classroom activities, the pupils through practice in the procedure outlined will automatically form good habits of study, thinking, and investigation.

TEACHING APPRECIATIONS, ASPIRATIONS, AND IDEALS

There are two methods of developing appreciations, aspirations, and ideals in elementary business training, the indirect method and the direct. In the United States most educators agree that appreciations and ideals should be taught by the indirect method. Under it, the desirable ideals and character traits are developed informally through situations in which the pupils' reactions are guided.

The procedure is not so indefinite as is usually imagined. The teacher should first list the traits to be developed. An analysis of such desirable ideals as honesty, courtesy, self-control, or industry will reveal that the trait is largely habit. A person acquires habits through practice. To use the method successfully, then, the teacher should encourage pupil participation in

many situations and activities in which the traits to be developed function. It will be found helpful if the activities are kept within the experiences of the pupils as it is very difficult to develop appreciations without understanding. Also, the ideals to be learned should be stressed and an effort should be made to minimize those traits which are undesirable. As progressive teachers we cannot safely ignore these products of indirect learning for, whether we wish it or not, pupils are constantly forming appreciations and ideals and our method of teaching will largely determine whether they are desirable or not.

The following rather definite procedures suggested by Lomax and Haynes will tend to ensure the formation of desirable character traits by the pupils of elementary-business training:[5]

1. *Diagnosing the Situation.* Whenever a problem presents itself and is not readily solved, this problem must be diagnosed to find the cause of the difficulty. When a student shows that he is lacking in certain traits, steps must be taken to ascertain the cause of this deficiency. "We diagnose to discover difficulties; but we also make diagnoses to discover abilities, ideals, and interests. The latter purpose is fully as important as the former, because in developing character and personality we must discover incentives in the pupil by the use of which we may create a desire for the ideals we wish him to possess.

We can discuss ideals in connection with success in life both in and out of school; and we can, as teachers of elementary business training, discover and aid in developing desirable ideals, as well as aid in correcting any deficiencies. In this connection, one of the greatest assets of a good teacher is his sympathetic understanding of the students in his classes.

2. *Creating Desire.* Another essential step in character-development is to create, in the mind of the student, a keen desire for certain ideals. The wish to inculcate these desirable ideals must be firmly fixed. In connection with this creation of a desire, it is possible to discuss the sterling qualities that are so essential to final success, no matter what our life work may be.

3. *Developing a Plan of Action.* Often, when a student has the desire for the attainment of an ideal, he will proceed to establish it firmly. Generally, however, it is essential that the teacher aid him in his efforts. This can be done in elementary business training by inspirational talks, and by reading and discussing autobiographies, as well as by applying the desired ideal to practical situations in the life of the student. This practical application is essential.

4. *Requiring Practice.* Practice is necessary to success in any activity. This must, however, be carried on without variation after the proper method has been decided upon. Merely having a desire to act in accordance with certain standards is not sufficient; action must really take place. Let us consider the matter of honesty. A student may have a strong desire to be honest. The test comes, however, when the opportunity to put this ideal into action presents itself. He must not falter, but actually practice honesty according to his standards. That is, these ideals must be incorporated into his behavior in order to become an integral part of his life.

5. *Integrating Personality.* Finally, to develop a strong and consistent personality, it is necessary to integrate traits, ideals, habits, and customs in such a way that the person will act in the light of principles. The intelligent individual not only acts appropriately to the occasion, but also realizes the reasons and principles which lie beneath his actions. One who does not generalize his ideals may act properly in one situation and fail to do so in another.

[5] Lomax and Haynes, *Problems of Teaching Elementary Business Training*, pp. 115-117 (New York: Prentice-Hall Inc., 1929).

In elementary business training, for instance, a student may become most industrious in connection with the work in filing; but, when reference books are taken up, this ideal may vanish. Such an example shows that the ideal of industry has not been firmly incorporated in his personality; in other words, it has not become a permanent part of himself.

Although we feel that the methods used in presenting the material in elementary business practice will largely determine the degree of success obtained in the subject, we must not forget that used indiscriminately they may prove ineffective or may even defeat the ends for which they are planned. Methods should be regarded as flexible, general guides. When they fail to produce results they should be modified or discarded. Why not assume an experimental attitude in choosing our methods? We would not buy a radio without experimenting. We would listen to several sets, get prices, evaluate, and finally demand a demonstration in our own home to determine the performance under specific conditions. If we used the same care in selecting our methods, presenting the work in elementary business training would become a game in which we would experience all of the satisfaction which knowledge of the game, versatility in planning, and skill in executing provide.

A FARM-BUDGETING PROJECT

PAUL E. FARNUM

EDITOR'S NOTE: *Paul E. Farnum, school supervisor of agriculture for the State of New Hampshire, submits a very specific and significant résumé of a project involving initiative, sound judgment, wise budgeting, and certain fundamental skills, as well as highly desirable traits of character.* A. D. W.

The old adage, "Don't count your chickens before they are hatched," may be a good caution to observe when one is guessing, but Hollis Davenport of Walpole, New Hampshire, does not believe that this applies to his situation. Hollis Davenport could not afford to guess. He is a farm boy with very limited resources. He had already demonstrated his thrift by building two good 10′ x 14′ colony houses from driftwood lumber picked up after the great New England flood of 1927. Hollis had had some experience with poultry on a small scale and wanted to enlarge his business. However, he was short of money and had to know what it would be likely to cost him and what he could count on making before risking a larger investment. His goal was to fill his colony houses with layers after using them for brooding, and in order to do this he figured he would need to start with 300 chicks. This situation was the basis on which he made the following careful estimates covering the rearing period up to the time when the broilers would be sold.

Feed consumption tables were consulted in estimating the amount of grain and mash required. There was an allowance for ten per cent mortality and a similar deduction in the estimated total amount of feed. Estimates on supplies were made on the basis of his experience and by consulting other poultrymen and the agricultural teacher.

Although he owned the buildings, it was decided that it would be simpler and just as accurate to charge for their use for four months rather than to inventory them, particularly since they were to be used later in the year for laying birds. A charge was likewise made for the brooder stove and other brooding equipment but for a full year, since these things would not be used for any other purpose.

Hollis bought his chicks for delivery

Estimated Expenses

Rearing 300 white leghorn chicks to 14 weeks of age

Item	Amount	Per Unit	Total
Coal	1 ton	$16.00 ton	$16.00
Grain (10% discounted for mortality)	1366 lbs.	3.25 cwt.	44.39
Mash (10% discounted for mortality)	1539 lbs.	3.35 cwt.	51.56
Cod-liver oil	1 gal.	2.25 gal.	2.25
Semisolid buttermilk	160 lbs.	.04 lb.	6.40
Carbola	5 lb. can	.75	.75
Concentrated lye	1 can	.30	.30
Shipping crates	7 crates	.65	4.55
Shavings	10 bales	.50	5.00
Labor	60 hrs.	.30	18.00
Opening inventory (300 chicks)	300 chicks	.18	54.00
Use of building, $30.00 @ 10% for 4 months			1.00
Use of equipment, $15.00 @ 10% for 1 year			1.50
Interest on average inventory, $109.50 @ 6% for 4 months			2.19
Rent for ¼ ground (value $40.00 per acre @ 10% for 4 months)			.34
Total cost			$208.23

Estimated Receipts

Item	Amount	Per Unit	Total
Broilers	320 lbs.	$ .30	$96.00
Closing inventory (pullets)	110	1.50	165.00
Manure	350 lbs.	6.00 per ton	1.05
Total receipts			$262.05

Estimated Financial Statement

Total receipts	$262.05
Total expenses	208.23
Net income	$53.82
Self-labor	18.00
Labor income	$71.82
Labor income per hour	1.19

March 16, 1929. He had contracted for white diarrhea-tested stock. They came in due time and things looked rosy when fate decreed otherwise. The chicks became droopy and diseased. It looked as if the old adage might be right after all. But Hollis had faith in the instruction which he had received and started to fight the infection effectively with sour milk. He succeeded but only after a loss of twenty-two per cent instead of his estimated loss of ten per cent. There were other less serious variations from his original estimates, some low and some high, but the final labor income earned was safely above the estimated amount by an encouraging margin.

On page 367 are the actual cost account figures for the same period.

In the opinion of the writer no other device in connection with project planning has proved so effective as has the making of estimates of cost, production, labor, and income. This procedure helps the boy to visualize his project as a tangible reality even before he had started it. It is not necessary to wait until the pupil has completed the instruction in the poultry course before making these estimates. The great-

ACTUAL EXPENSE

Rearing 300 white leghorn chicks to 14 weeks of age

Item	Amount	Per Unit	Total
Coal	½+ ton	$16.00	$8.52
Wirthmore chick grain	200 lbs.	3.15	6.30
Wirthmore intermediate chick grain	800 lbs.	2.85	22.80
Wirthmore starter	400 lbs.	3.90	15.60
Wirthmore growing feed	800 lbs.	3.05	24.40
Semisolid buttermilk	50 lbs.	.08½	4.25
Whole milk	40 qts.	.08	3.20
Carbola	5 lb. can	.75	.75
Spray	½ gal.	1.80	.90
Lye	1 can	.30	.30
Shipping crates	4	.40	1.60
Shavings	6 bales	.50	3.00
Labor	98 hrs.	.30	29.40
Opening inventory (300 chicks)	300	.18	54.00
Use of building, $30.00 @ 10% for 4 months			1.00
Use of equipment, $15 @ 10% for 1 year			1.50
Interest on average inventory, $127.50 @ 6% for 4 months			2.55
Rent for ¼ acre ground (value $40 per acre @ 10% for 4 months)			.34
Total cost			$180.41

ACTUAL RECEIPTS

Item	Amount	Per Unit	Total
Broilers	150 lbs.	$0.31	$40.99
Broilers	31 lbs.	.30	7.93
Closing inventory (pullets)	134	1.50	201.00
Manure	300 lbs.	6.00 per ton	.90
Total receipts			$250.82

ACTUAL FINANCIAL STATEMENT

Total receipts	$250.82
Total expenses	180.41
Net income	$70.41
Self-labor	29.40
Labor income	$99.81
Labor income per hour	$1.02

est benefit comes from doing this work with the aid of the teacher at the time when projects are being selected. These preliminary estimates will, of course, be checked for accuracy as study progresses, but by that time they will have served their major purpose, that of effective motivation.

A GOOD START IN POULTRY

Clarence Hall is a junior in vocational agriculture at Weare High School. He lives with his parents on a small farm some two miles from the school. Weare is located in the south-central portion of the State where poultry and dairying are of major importance. Both the father and older brother work in the near-by village leaving practically all the farm work for Clarence to do. The farm is small, offering very little opportunity for dairying although there are at present a number of head of young stock.

A project is required of every boy enrolled in vocational agriculture. The nature of the project is left more or less to the individual boy, to suit his own particular situation. It, however, must be approved by the agricultural instructor.

Clarence is very much interested in poultry and had had a little experience in previous years. Last March he bought 300 white leghorn chicks from a prominent poultry breeder in a neighboring city. This was excellent stock as he wished to obtain the best birds possible for his flock. A small henhouse back of the barn was remodeled for a brooder house. Clarence gave his flock good care, following the best of feeding practices which he had learned at school. His efforts were rewarded, for only two per cent of his birds died up to fourteen weeks of age, an exceptionally low mortality record. The cockerels were sold as broilers and when the birds began to lay at four and one-half months of age, Clarence found he had 146 good pullets.

Housing was the next problem. There were no suitable winter quarters on the farm. The farm flock in previous years had been small and no particular attention had been paid to their care and quarters. There seemed to be nothing to do but build a laying house. His limited means necessitated the cheapest house. Clarence figured the cost of building a separate laying unit but decided that an addition in the form of a lean-to on the back of the barn would suit his needs better. The barn was high in the back allowing a two-story house to be built very nicely. New lumber was too expensive so he looked around and finally picked up enough second-hand material. The house was built to provide room for seventy-five birds on each floor. The total cost of lumber and roofing was only about $30.00. Clarence built the house during the summer vacation.

In September, four pullets and a cockerel were selected and exhibited at the county fair. The pen won first prize in its class as well as the best pen of leghorns exhibited in any class.

Clarence is so well satisfied with his present success with poultry that he will increase his flock next spring and enlarge his housing facilities.

POULTRY IS PAYING FOR COLLEGE EDUCATION

An agricultural-college education is the objective towards which Dana Goodwin has been aiming during the last three years. Dana is graduating this year from the agricultural course in the high school. It has been a hard struggle, but through the returns from his project in poultry he is nearing his goal.

Three years ago, Dana, with his invalid father, his mother, and a young sister moved to a small poultry and fruit farm on the outskirts of Hollis, a rural community in southern New Hampshire. The responsibility of the farm work necessarily fell upon Dana and his mother. Poultry seemed to be the most feasible enterprise.

There are facilities for housing about 400 birds on the farm. Each year enough chicks have been raised to fill the laying house. Last spring, Dana decided to try his skill at hatching. A second-hand 600-egg incubator was purchased in a nearby town. Dana gained assistance in running the machine from his agricultural instructor and neighboring poultrymen. The machine was set twice during the spring with an average of seventy-one per cent for the two hatches. By buying good quality hatching eggs at seven cents each he found that a considerable sum was saved by hatching the eggs himself, since twenty-five cents per chick is the customary sale price. Dana raised this season 140 more pullets than he could house this fall. These were sold at prices ranging from $1.57 to $2.25 per bird thus paying him well for his work. During the summer when business was slack at home, he worked out helping the neighbors with their haying.

Fully convinced that there is an opportunity in poultry, Dana started his incubator again and is now raising winter broilers. He hopes to continue this through the winter if the price of broilers remains high. With a season before him we leave Dana utilizing every facility to increase his savings as much as possible before next fall. Surely this boy deserves a college education and for him it will be truly worth while.

A COMMUNITY PROJECT IN FINE ARTS

MARY DOUX

EDITOR'S NOTE: *Mary Doux is chairman of the art department of the Girls Commercial High School in Brooklyn, New York. As the following article indicates, this department has taken a long step forward in vitalizing the curriculum through community contacts.* A. D. W.

Our desire to make the work of our classes a study of real problems has led us into some interesting experiments and has brought us valuable knowledge. Our course of study in the grades of required work is in the direction of developing appreciation of beauty. The first step in this direction is to develop an understanding of fundamental art principles as expressed in everyday life. This has led us to the consideration of art in dress and art in the home arrangements.

At best, the equipment of any classroom for the study of home arrangements is inadequate. With longing we thought of the department store with its wealth of illustrative materials. So when the department store of Abraham and Straus of Brooklyn came forward with the suggestion that we work with them in the arrangement of their model apartment, we were ready to say yes. This coöperation established a project that took two months to cover. Our problem was to plan arrangements for the living room and the bedroom of a three-room apartment, to use stock from the Abraham and Straus store, and to keep the supposed cost within $500. Pictures and small accessories were not to be included in the sum.

To accomplish this, three classes worked together in eight teams. The first class was composed of girls studying art appreciation in a nontechnical way. These girls, divided into teams of four, received classroom instruction by which the use of art principles was explained to them. The rooms of the store were visited, the stock of furnishings critically examined, possible room arrangements thought out, and finally each team made its decision as to just what pieces they would buy to furnish the room. Each team drew a rough floor plan explaining the arrangement of their selections. At this point a class of third-term girls who were studying drawing joined the first group. Divided also into teams, they met the first teams at the store and made careful sketches of the various pieces of furniture. Later in the classroom these sketches were developed into larger perspective drawings showing the appearance of the rooms as they would look in the eight different ways planned. A class of girls studying color then came on the scene. Eight teams were matched with the other teams. These girls took the perspective drawings and arrangements designed by the first workers and developed them in color.

A committee of teachers made a selection of the best eight finished designs and these were submitted to a jury of outside art critics secured by Abraham and Straus. Two designs were selected by them as being best. The team whose design won first place then went to the store, and with the help of the furniture movers put the furniture in place. Accessories were added in the way of pictures and so forth. The act of arranging the rooms gave an oppor-

tunity for some very fine teaching, for the actual arranging of objects, hanging of pictures, and so on brought forward points that had to be discussed then and there, and settled from a practical as well as an artistic point of view. The apartment remained on view for two weeks while all the mothers and the fathers, the uncles and the aunts, came to see what the girls had done. At the end of the two weeks, the second design was set in place and was on view for another two weeks.

The following term the project was again taken up. This time it became of more general interest for more classes worked for it. In addition to the steps taken the first time, accessories for the apartment were made as class problems in the elementary classes. Various crafts were applied to pillow tops, table runners, boxes, and lamp shades, the best of which were used in the next set-up of the apartment. This was done to demonstrate the use of art in the home, aside from the use of color, line, and arrangement.

Other coöperations with this store have helped us greatly. Costumes for the high-school girl were selected by classes according to art principles learned in the classroom. These selections were grouped in the store and advertised by Abraham and Straus as costumes for the high-school girls selected by her. Our costume-illustrating class then sketched them and some of these drawings were used by the store in their newspaper advertisements. This gave practical experience to girls who are training to be trade sketchers.

Another effort we have made to bring our work in line with real life has been through the employment as teacher of a woman who was a professional trade designer and sketcher. Her work with us is to keep in close touch with trade requirements and conditions, to take our work to the trade for sale and criticism, to find positions for our graduates; in a word, to form the contact with the trade that enables us to teach most effectively those girls who need to earn their living, and who are training with us to earn this living with pen and brush.

Our effort throughout is to face actual conditions of home life and business life, and to make our school work an active part of it all. As a result, our course of study changes constantly as we see opportunities come nearer our aims. In outside contacts we have learned one valuable lesson—that much is to be gained by studying what the other fellow wants. In our case the department store was really interested in budgets for apartments and costumes. Immediately we developed an interest in budgets to further our interest in color and design. This, we believe, leads to mutual helpfulness.

HIGH-SCHOOL DRAMATICS

MATTHEW PAGE GAFFNEY

EDITOR'S NOTE: *Mr. Gaffney is principal of the Junior-Senior High School in Great Neck, Long Island.* D. I. M.

Dr. Briggs has a way of forcing you to think things through to a conclusion by saying, "If you were restricted by nothing, no set curriculum, no college entrance requirements, no traditional subjects, but were free to plan a curriculum exactly to your taste, what would you put in it?" I have often pondered that question and worked on my ideal curriculum. Some activities I am not sure of, but I know dramatics would hold one of the first places. Why?

Dramatics offers one of the best opportunities for putting right into practice here and now the theories and philosophy of education to which we give lip service. As

schoolmen we ought to jump at any activity which makes it possible legitimately to translate into worth-while school activity the ideas we assent to and approve when we study adolescent psychology and philosophy of education without the responsibility of doing anything about it.

We know that adolescent boys and girls need opportunity to express themselves, to do something that is active, to organize something, to get together in groups, to appear to advantage before their fellows, to extend their personality, and give their imagination play. We know that particularly in the early years—the junior-high period—the favorite literature is literature of action; to dramatize a piece of literature gives it that element that most appeals to them. Then personally it takes the pupil out of himself and forms one of the best means of getting him through a period of self-consciousness and awkwardness that sometimes overtakes the adolescent. Desires and feelings can be given expression that otherwise work out in less desirable channels.

By-products are often more valuable than the main objective. I have watched with great interest a wholesome change in pupil-teacher relationships brought about by an extensive program of dramatics. In the kindergarten and primary the teacher is a superior being to the pupil—alas, transformed too often by high-school days to a cross task setter working at odds with the pupil. Surely the ideal high-school relationship is one where the teacher, while still being in control, works with pupils shoulder to shoulder, and they are fellow adventurers in each new field. Dramatics gives opportunity for just this sort of coöperative endeavor. I have seen a teacher and a dozen boys and girls working out a simple Latin play to present in twenty minutes before a school assembly and seen the miracle of the abyss that the teacher's desk had set up between this teacher and her class disappear never to return.

As with everything else there are right ways and wrong ways and many of each. The suggestions I have grow out of seven years' experience putting on plays in a boys' summer camp, topped by five years of close contact with the dramatic work in a Western high school.

I have found that the younger boys and girls throw themselves much more easily into romantic parts with plenty of action than into characters too nearly like themselves. To act out a story seems the most natural thing in the world to a group once they get the idea. *Robin Hood, The Prince and the Pauper, The Man Without a Country, Treasure Island,* are books into the dramatization of which pupils will throw themselves with zeal.

Whenever the boys and girls can be led to take a hand in the dramatization themselves the results are more worth while. The history teacher who overlooks the many episodes in her subject which cry out for dramatic treatment loses one of her best opportunities for vitalizing her subject and for using it as a medium to develop boys and girls. Science, geography, English, and even mathematics may all furnish dramatic material for the teacher who sees the possibilities.

Preparing a program to present before an assembly furnishes an opportunity for every department to explain its work in dramatic terms. The many drives for health, safety, thrift, fire prevention, and so forth, give further opportunity for dramatization. The morality play where the character has the name of a quality furnishes a simple and direct means that appeals at least to the junior-high-school years.

In addition to action and dramatic climaxes, an abundance of humor is never amiss.

"High-school dramatics" to too many teachers means the highly drilled produc-

tion given after weeks of toil by the senior class in order to raise money for the football team. These productions have their place, and perhaps meet real needs, but they only scratch the surface as far as educational value is concerned. Like the football team itself this sort of production picks and gives further training to the pupil already proficient in this line. Much is being written and talked about the necessity of physical education and the inculcation of health habits and play habits in all boys and girls—not just the picked squad. We all recognize the truth of it and fortunately great progress is being made in our schools in getting every boy and every girl into some physical activity. But it is just as true of dramatics. Mary Brown, the stodgy, awkward girl of thirteen whom no one would ever think of picking for a part in a class play, may for her own development have much more need of a part than Estelle Smith, that cute little blond who spends every day anyway dramatizing herself all over the school building. And the pride that Mary Brown will take in appearing in a small way, and the pride that her mother and aunts and cousins will take, is almost pathetic. When it means so much to her self-confidence and self-respect and feeling that she's had a square deal, surely we ought to furnish the opportunity.

Not all the desirable ends are achieved, unfortunately, by virtue of deciding to have a dramatic program. No other needs more careful planning or more skillful handling, more easily loses sight of its main objectives, or gets more easily out of hand. The teachers in charge must be really interested in dramatic expression and really interested in boys and girls.

One year at the Central High School in Aberdeen, South Dakota, we had a peculiar experience. Tryouts for class plays were very keen and disappointments very bitter. For every boy or girl who got a part six others didn't. It seemed too bad. I suggested to one of the teachers whom I knew to be disturbed by the situation that we form a drama club open to all for the presentation of one-act plays about once every six weeks. The whole thing was to be very informal, the plays to be presented before the other members of the club, and a real chance for every boy and girl to take part who wanted to. Pupils appearing in the regular school plays were not expected to join. We figured perhaps we would have a club of sixty and we made our announcements and posted blanks to be signed by those pupils wishing to join. The next day Miss Douglas, the teacher in charge, came to me with a disturbed expression, "Our drama club has 400 members," she said. We were in for it and no backing out. We did some quick thinking, had an enthusiastic first meeting, divided into groups of about fifteen each, with a chairman for each group, begged as many teachers as we dared at least to let a group practice in their rooms after school, and got members of the senior class who were studying drama in 12A to help direct some of these groups. Then for the rest of the year we met about one evening every two or three weeks and had a program of one-act plays. The choice of plays was always approved by the adviser but sometimes the only time that the play was seen by a teacher was in the dress rehearsal. Some excellent work in directing was done by senior pupils and there were boys and girls who showed ability never before suspected. The library was besieged for one-act plays and at least one excellent dramatization—that of Tennyson's *Princess*—was produced.

We had to go to some lengths to get every boy and girl a part. I remember one play where the number of girls we managed to get into a picnic scene looked like Coney Island on a one-hundred-degree day.

The club burned itself out. We couldn't have kept up the pace a second year; but it served its purpose and interest in dra-

matics extended in other directions. Last year I witnessed one particularly worthwhile manifestation. The Latin club gave a Roman banquet. Their invitations were sent on little scrolls wound on two sticks; their menu was as close as they could approach a Roman meal; the implements were in keeping; slaves washed our fingers between courses; the guests were crowned with garlands, and an entertainment in true Roman style followed. It was all done very simply and inexpensively but one was impressed by the way these boys and girls threw themselves into the thing and became for the time being noble Romans.

If I were starting out to develop an extensive dramatic program in a school I would have in mind a few practical guides. For the junior-high-school years I would use plays with plenty of action and not too much talk. I should start the work as a development of classroom activities, forming later a club, or a number of clubs, if the organization of the school made provision for club activities.

Treasure Island lends itself ideally to this sort of thing for the boys. Various groups can work out various scenes and the whole can be drawn together for production before the entire assembly. Scenes from such books as *To Have and to Hold*—particularly the pirate scenes—make gorgeous informal plays for class groups. As they get the spirit of the thing finer types of work come naturally.

The senior-high-school boy and girl are harder to suit in the matter of choice of play, and a great deal of skill is required in getting just the play for the group. I would never decide on the play without careful study of the group available. The best school play I have ever seen, by a long way, was a production of Josephine Preston Peabody's play, "The Piper," by a senior class in the Aberdeen High School. It was within their range, but to have given it with the seniors of the next year or the next would have invited sure failure. "The Charm School" fitted them like a glove.

We tried an interesting experiment with "The Piper." That particular class had an embarrassment of riches in the form of talent. It seemed positively wrong to pick certain pupils and drop others, so the director prepared the whole play with a double cast. Excitement was intense. They became known as Lyle's cast and Bernard's cast, according to the boys that played the Piper. The original idea was that as production approached we would choose the better of each interpretation. But we couldn't do it. We wound up with three performances. Bernard's cast gave the first, Lyle's the second, and for the third we let the two casts play alternate acts!

I have not yet mentioned the staging of plays. What a field for the inventive boys and girls, and how they take to it! The results that can be achieved on a poor stage with some beaver board, paint, curtains, lights, and borrowed furniture are surprising. I am always amazed at the ingenuity, persistence, and dependability that the high-school boy or girl will show when tackling a problem in which he or she is really interested. To set a problem and work it out to a satisfactory solution—that is education. Yes, dramatics furnish a rich field, and most schools have as yet not more than looked over the fence.

AN EXPERIMENT IN TESTING THE TEACHING OF CIVIC THINKING

JENNIE K. BROWN

EDITOR'S NOTE: *Miss Jennie K. Brown is head of the department of social science in the East Side Junior High School in Little Rock, Arkansas.*

D. I. M.

In the fall of 1928 the East Side Junior High set about to determine the extent to which civics as then taught was actually functioning, and in what manner the program of extracurricular activities could be correlated with the social-science program so as better to produce the civics outcomes stated in the social-science course of study.

To do this the author, under the direction of Dean C. E. Prall, of the University of Arkansas, who was then conducting a class in diagnostic testing, began formulating a series of test exercises for the purpose of measuring the ability of a social-science pupil to do civic thinking and to determine the relation between his knowledge of social-science facts and his ability to do civic thinking. The experiment was tried with 131 9A social-science pupils of East Side Junior High School.

The information tests were made first. In making these, the course was carefully covered and a list was made of the main facts that were to be taught. This list was then studied for the purpose of deciding the best kind of test for each item. The resulting information test consisted of four sections: the first, a completion test of thirty items; the second section, a matching test of twenty items; the third, a multiple-choice test of twenty items; and the fourth, a false and true test of twenty-five items.

These tests were then given and scored and the reliability was determined from the correlation between chance halves. This gave a reliability coefficient of .816. The correlation was also computed between the four sections and the first three to see if the false and true section improved the test. The correlation was .896, which showed the test would be practically as good with Section IV omitted.

A test slightly different from the information test and intended to measure a different outcome was then prepared. For want of a better name, this has been called a measure of civic thinking. As implied in the name, each item of the test was expected to present some element of novelty or newness which would demand the successful functioning of organized knowledge as apposed to the possible utilization of memorized answers in the information battery.

Section I of the civic-thinking test consisted of a list of 33 governmental functions performed by the city, State, or nation, or by more than one of these agencies. The student was asked to indicate by a check mark or by more than one check the agency or agencies performing the given service or taking part in it. Credit was allowed for each correctly checked item, and partial credit in some instances for items that were incompletely checked. The reliability of this test, found by securing the correlation between the scores on chance halves, was .77.

Interestingly enough, the scores on this test were found to be correlated with the scores on the information battery by a positive coefficient of .62. In view of the fact that this high relationship did not exist between the second part of the civic-thinking test and the information battery, it was decided that this part was too closely related to the information check-up to be considered as a measure of a different outcome.

Section II of the civic-thinking test consisted of two parts. The first contained sep-

arate lists of qualifications of two candidates for the offices of alderman, county judge, and president of the council of the East Side Junior High School. With each pair of qualifications the student was asked to check the small square above the list which indicated the candidate best fitted for the office.

In addition, he was asked to make check marks to indicate the two chief qualifications on which he based his decision. The method of scoring allowed credit for selecting the right candidate, and for indicating the most important qualifications, while negative credit was given for indicating qualifications that were not significant in connection with the work of that office.

The second part of Section II consisted of an inference test. Twelve situations were described, each of which was followed by four conclusions or inferences. These were so selected that one or two might reveal bias or failure to think in terms of the best interests of society. The student was asked to check the conclusion which he believed followed from the facts as described in the introductory statement. Credit was given only for checking the inference that could properly be drawn from the facts as given. Samples of these situations with the four alternative conclusions will be found later in this report.

The small number of grading items in this part of the test prevented its having high reliability (.45). However, when the students have been ranked on the basis of the teacher's judgment as to their ability to do civic thinking, these ranks showed a positive correlation with the scores on this section of .53. When we consider the many inaccuracies that enter into the teacher's judgments as to specific abilities and the low reliability of the test, this is a relatively high correlation and indicates satisfactory validity, for a test containing more situations of the same general make-up.

The scores on the information battery (reliability .816) were then tabulated with the scores on Section II of the civic-thinking test (reliability .45) on a Pearson Product-Moment chart and a relationship here shown between factual information and the ability to think straight in a civic situation cannot be explained wholly by the low reliability of the second test, but indicates that the two outcomes are not closely interdependent. This, of course, is only a tentative conclusion and needs further experimental verification with more reliable measures.

The next step was to determine what activity can be provided for these students that will furnish situations which will cause the pupil to revise his type of thinking, thus producing civic outcomes which the course in social science is expected to produce.

This study shows that the subject matter and method used in the teaching of civics was not producing the outcomes desired. Pupils were not being taught "to do" things that they are expected to do in life.

For example the course emphasizes as its objective civic thinking; but when the test situation presented below was given, the results did not show the desired pupil outcomes.

> A lady driving down the street at a normal rate failed to see the stop signal just above the pavement. A man was coming at right angles and driving at an excessive rate of speed. The man's car struck the woman's car, killing the man. The man's wife did not prosecute the case.

Directions: Mere facts may mean different things to different people. Place a check (√) in front of each conclusion that you believe is fairly based upon the facts as given in the introductory statement to each question:

a If the wife drops the case, the public should.

b Any one who drives a car and has an accident should take just what comes to him.

c The city should bring this before the court and see that responsible persons are punished.

d No one of these conclusions can fairly be drawn.

Thirty-two per cent of the upper third of the class and 58 per cent of the lowest third of the class had not developed a civic consciousness that enabled them to see that a civic responsibility rested on the city.

Furthermore, a similar result is found in replies to the following question:

> The regular session of the Legislature failed to make provision for tick eradication. Many States are quarantining against Arkansas cattle, causing big financial losses. The governor calls a special session to provide for tick eradication.
>
> *a* It was the legislature's fault; therefore, each member should bear his own expense at the special session.
>
> *b* The cattle should be sold in the States that did not quarantine against them.
>
> *c* Since we are not in the tick-infested territory, we are not concerned.
>
> *d* No one of these conclusions can fairly be drawn.

The answers show that a civic consciousness had not been developed in the individual that caused him to realize his duty as a citizen—that it really was his business and that he was really concerned although he did not live in the district. Forty-four per cent of the upper third and 77 per cent of the lowest third failed to realize this responsibility.

The following example shows a situation in student life:

> A certain school has an honor study hall. Each pupil assigned to this study hall signed a pledge to be orderly and studious and help preserve order. The president of the Student Organization was in this study hall and so was another pupil who was a decidedly disturbing element. There was no monitor.
>
> *a* The president of the student organization was no more responsible than any one else.
>
> *b* The president of the student organization should report the disturbance with or without name of offender if he could not correct it.
>
> *c* He should resign as president if he could not control it himself.
>
> *d* No one of these conclusions can fairly be drawn.

In this only 8 per cent of the upper third and 32 per cent of the lowest third failed to recognize the responsibility of the student president. Undoubtedly most of the upper third of these pupils who recognized so well student responsibility had themselves held positions in the student organizations, and it is not unreasonable to suppose that most of the lowest third had not had this experience.

The three examples given are only typical of the twelve situations. These examples have illustrated the failure of some of the pupils to think in terms of civic responsibility. The test showed that the brighter pupils were able to do better civic thinking than were the dull pupils. However, when the situation was one in which the pupils had experience, as in the case of the school council, monitor, or police officer, the lower group came closer to the reasoning of the upper group.

It is hoped that by placing these pupils—pupils who lack a sensitiveness to civic responsibility—in responsible positions and in the situations by which they experience the results of lethargy towards civic responsibilities, the desired sensitivity to social responsibility will be produced. It is also hoped that experiments of this nature may tend to make social-science teachers sensitive to the fact that their pupils are not able to think straight in total situations, even though they may possess a fair degree of

factual knowledge in given fields. Without doubt, such experiments as the one described above suggest a chance for a greatly enriched civics curriculum which would make it possible for the teacher to detect those students who lack sense of membership in a large group rather early in the course. These conclusions, of course, are only tentative and there is a need for further experimentation along this line before they can be fully accepted. However, the indications point in these directions.

WHAT KIND OF HIGH-SCHOOL COMMENCEMENT SHALL WE HAVE?

FLOYD E. HARSHMAN

EDITOR'S NOTE: *Mr. Harshman has been for the past six years principal of the High School at Athens, Ohio. His chief work there was to reorganize the school to permit maximum participation on the part of pupils both in the classroom and in diversified extraclass activities. The program, herein described, was simply an outgrowth of the ideals of the school as it was organized and administered.* P. W. L. C.

At the beginning of this discussion let us ask ourselves a question: In the light of modern tendencies, what kind of high-school commencement program really typifies the thing we are trying to do in the school?

The writer will attempt to answer this question by the statement of some guiding principles and by citing the satisfaction of the members of a community in a mid-western State when a new kind of program was worked out.

If the new curriculum realizes its ideal of developing young men and women who are responsible and resourceful citizens of the school and community; if these young people really learn to assume social and civic responsibility; and if the school gives them a chance to express themselves, then they should be able to plan a very enjoyable evening for their parents and friends of the community at the end of their four years in high school.

While we have no quarrel with the conventional plan of inviting an educator of more than local reputation to come for the evening and tell the young folk and their friends all about the new responsibilities which rest upon them, as "they go out into life," it seems rather a paradox; in view of the fact that we have been repeating for some years that school is life and that boys and girls in school are assuming responsibility and are bearing their own social and civic burdens. It would be fair to say that in most instances the speaker-guest of the evening would far rather hear and see some of the results of education than to talk for an hour about them.

Just how does this program proceed? The class files onto the platform; the school executives and the speaker follow; the class sings, and the speaker delivers his message. After this event, an official gives the members of the class their diplomas, and the evening is complete. And during the whole evening no sign of the results which the school claims for itself has been in evidence except the music and the display of new garments which are used for the occasion. These are important, but other important features are lacking.

The evening of commencement should offer an opportunity for the boys and girls to exhibit some of the things which they have discovered, some of the results to them of this process which we call education. It should be their evening for it is their commencement.

Permit me to illustrate the ideas ad-

vanced by describing the activities of commencement week in a small Ohio city where, through the stimulation and help of a forward-looking superintendent, a new type of exercise was planned. After discussion with several of the members of the class, teachers, and others, a meeting of the class was called and the following opinions were formulated:

First, that the class sermon should offer the churches of the city an opportunity to plan a service for the class. The ministerial body was asked to plan such a service and to have one of their number deliver the message of the evening.

Second, that the class-day program should be given by the class for their school and that it should be followed by a reception for the parents and friends. An excellent social time was planned, and the usual class-day features were provided for.

Third, that the commencement program should be one planned and given by the members of the class for the community without the help of an outside speaker.

Little need be said here about the first two events. The religious service at a time like this gives an excellent opportunity to impress the young folk with the importance of religion in all life undertakings. The class day and reception give an opportunity for a get-together and social time which is valuable at the end of the year. The whole afternoon was well worked out. However, the chief concern of this article is the final program of commencement. This event was planned as follows:

The class met with its sponsors, the superintendent, and principal. After talking the matter through for some time the group adopted this plan. The class would furnish the program consisting of its class song, a class chorus, girls' octette, boys' quartette, speeches by six members of the class, and a suitable final number which it was decided should be patriotic in nature. As to the selection of speakers, the group decided that two should be selected on the basis of scholastic standing, two by vote of the class, and two by vote of the faculty. The next step was the selection of a theme for the evening's speeches. The superintendent suggested "Dramatic Episodes in American History," which when finally stated were as follows: Patrick Henry before the Virginia Assembly, Webster's reply to Hayne, Lincoln at Cooper Union, Horace Mann before the Boston School Masters, Bryan and his Cross of Gold, and Woodrow Wilson before the joint session of Congress. A teacher of broad experience was appointed to direct the efforts of the speakers. She was the teacher of American history and a very able person for such work. The chief task was to assist the young people in their quest for materials which might be read in preparation for the writing of papers.

During the part of the year in which the papers were being prepared there was the heavy load of the pupils to consider. The work was lightened so that ample time was given for research, and the load of the teacher was also reduced during the semester so that the work could proceed smoothly. These young people were getting so much more out of this interest than out of anything else that we did not believe any other thing should interfere with its success. The big thing was the final outcome of the speeches.

It might be supposed that the final result of this idea would be papers composed of interesting excerpts from the addresses of the men named. Of course there were quotations from them but not slavish repeatings of the work of another. They were built about all of the interesting events which led up to, and the results to humanity which attended these addresses. In other words, after much reading and discussion with the teacher-adviser, and after critical and independent thinking, each one wrote his paper. The questions, what was the background of the declaration of Horace Mann? how did

it affect the people of his time? and does it make any difference to the people of to-day? were asked and answers attempted. There was a belief that the socializing experiences which these young people had been permitted in the classrooms would carry over into this enterprise. The results were very convincing.

To describe the evening of commencement: the class came in to the auditorium singing its class song, written by two of its own members, and, after an invocation, sang the chorus number. The class was seated with the ones who were to take special parts near the front of the stage. The class president was in charge. No member of the school board, school staff, or administration was on the stage. The class president opened the speaking part of the program by introducing the theme for the evening, told how the speakers had been chosen, and introduced the first speaker. Then followed the various speakers with musical numbers at intervals. When the speeches were over, a member of the Board of Education went to the stage and, after congratulating the members of the class upon their excellent program, presented them with diplomas. Following this came the patriotic finale and the evening was ended.

It would be impossible to give an estimate of the number who came in to express their satisfaction with this different program. A reprint of an editorial from the daily paper will give some idea of the feeling of the community. This is how it ran: "We attended the High-School commencement last night where we expected to see and hear the usual thing; see a class seated on a stage while a prominent educator discussed some phase of education. A pleasant surprise was in store, for the young folk, one hundred twenty strong, came in singing their class song, were seated, and not a soul to be seen on that stage but the class. Here was something different, and we became interested at once. Our own boys and girls entertained us last night. Their president introduced their theme as, 'Dramatic Episodes in American History,' and we were led through six of the most important periods of our national life by six members of the class who spoke on these episodes. They talked about Patrick Henry and the results of his spirit on American liberty, Webster's reply to Hayne, Lincoln's almost impossible task, the influence of Horace Mann on education, Bryan's influence in American politics, and Woodrow Wilson before the joint session of Congress. Not repetitions, but their own thought and conclusion reached in school and out. It gave us an idea concerning what schools are doing in these days. There was not a dull moment. Something happened every minute and our young people did it. We hope to witness many more such commencements."

That is about all that need be said concerning the program except that the class enjoyed it, and that is all important. The sense of achievement and the satisfaction to the class is the main argument in favor of such a program. In it they have a chance to grow.

Other years we used as themes "The President and His Cabinet," "Men and Women Who Have Succeeded," "Our Government and Our Responsibility." Many more can be found and classes and communities will enjoy them.

In conclusion, if we are proud of the results in our school, if we have achieved our objectives even in part, and if boys and girls have become responsible citizens of the school and community, these facts should not be forgotten when we are planning the program that will conclude their membership in the school. The program typical of our ideals will be one of pupil participation.

BOOK REVIEWS

General Method: Foundation and Applications, by JOHN P. WYNNE (Century).

The author has endeavored to avoid writing "another" book in the field of method with its own slant on techniques and procedures. Rather he has aimed to present foundation principles in methods and principles of teaching and to apply these to procedure in teaching.

The best that biology, psychology, and sociology have to contribute are utilized in the support of the conception of method as progressive adjustment. "The conception of experience as a process of dynamic and progressive adjustment seems to lay the foundation of the theory of method that we need. In this conception, organism and environment are combined into a unified and continuous relationship in experience."

After differentiating special methods and general techniques from general methods, the writer points out what he sees to be typical inadequacies in interpretations and elaborations of general method through logical analysis. Such analyses as the five formal steps, the stages of reflective thinking, and the steps of purposeful activity are illustrative. Logical analysis falls down on three counts, according to Wynne; namely, integration, communicability, and formalism.

No doubt there is a real contribution made in the second half of the book which is devoted to the elaboration of general method through interpretation of practical conceptions. In an analysis of factors common to all learning-teaching situations, the writer has arrived at the following classification:

1. Selection of undertakings
2. Independent work
3. The class meeting
4. Provision and selection of materials
5. Estimation of progress, methods, and conceptions

While this classification is not given as final, it does aim to be inclusive of all pertinent elements. The principles developed by the writer under each of these captions tend to clarify and unify much that is now a conglomerate mass to the teacher and student of education. F. C. Borgeson

Contemporary Education — Its Principles and Practices, by PAUL KLAPPER (D. Appleton and Company).

Professor Klapper has, in the writing of this book, made a real contribution to the progress of education; he has produced a book which will appeal not merely to the professional educator but to every man and woman who is really interested in education as a great social force. Every teacher will find himself invigorated by it. I cannot urge too strongly the wisdom of reading it to the members of that group who need constant fertilization even more than the class teacher, the administrative group, principals, and especially my fellow superintendents.

Chapter I sets forth his philosophy of education; "that education then is best which gives the individual the freest possible development consistent with the social welfare." Throughout, the book upholds the thesis that "Education is the greatest function and the final safeguard of society and its organized form, the state," a thesis to which all men assent but upon which few act. In his discussion of "the function of education as the acquisition of the spiritual inheritance of the race," Dr. Klapper sounds a warning which is sadly needed by many teachers of this generation. "Education is not an absorbing process. It is rather an unfolding of powers and capacities already in the child....."

"We hold that only as each individual's differences are recognized and as his gifts are developed are we making him socially efficient. Our first business in education is to differentiate pupils; to set off those who have exceptional power from those who who are fairly capable, and both of these from the mediocre and the inferior-minded. Our task is not yet complete. We must discover those who are specially endowed with distinctive manual, intellectual, linguistic, or aesthetic gifts. Then are we ready to plan the education of the different groups with the hope of approximating social efficiency—social efficiency depends on our ability to discover differences and educate differently. The more uniform the educational process the less efficient socially will individuals become."

In Part II, beginning with the "biological implications in education," in five chapters there is presented a comprehensive, socialized plan of physical education. The great educational value of play is stressed. A characteristic sanity and moderation is displayed in the treatment of our sex education. "With our present lack of accurate knowledge of the psychology of sex and of the relation between endocrine glands and personality there can be no methodology of sex teaching. We grope about, sounding a few cautions, and then sagely advise an approach that is determined by the nature of the individual child. The suggestions for methods of teaching are at this stage essentially indirect and negative and altogether empirical. The school exercises its influence but, at best, it is perhaps the weakest agent in sex guidance."

Part VI devotes its ninety-four pages to "Education as Social Adjustment, Sub-division A," dealing

with "Socializing the Child Through the Curriculum," and Subdivision B, with "Socializing the Child through Group Activities." The term adjustment implies changing the environment—physical, social, and moral—to harmonize with the individual rather than the constant changing of the individual to satisfy the demands of his environment. The complete environment for an individual is the sum total of all necessary racial experiences. This conception of environment, including the spiritual as well as the material, the past as well as the present, places every child on a higher initial plane than that of his forefathers. Education, by adjusting the pupil to his complete environment, helps him to relive the experiences of the race and, by reproducing his own mind, the mind of the race makes him a rational part of the social body."

Professor Klapper sees frequently a conflict between the child and the curriculum in that the psychology of the curriculum is not the psychology of the child. "The child lives in a world of action and of things; in a world essentially of the present. His life is limited by the experiences of his few years and his meager mental possessions. The curriculum thrusts him into time and space and confronts him with principles that sum up the eternal verities... Curricula are the products of adult thought; they have the adult outlook and satisfy adult interests. They approach life with the certainty born of maturity, not with the curiosity and uncertainty of childhood.

"The second outstanding defect of existing curricula is their failure to recognize how completely integrated is the child's life. To young people life is one great, big, unified, challenging experience. Curricula present, not life, but a series of separate subjects which are not infrequently taught as if there were no relationship among them."

In this criticism Klapper strikes at possibly the outstanding weakness of American education, whether of elementary or secondary grade, a weakness which but a few progressive schools are remedying to any great extent in the integrated curricula their pupils enjoy.

We urge most strongly upon supervisors and teachers alike a most thorough consideration of Chapter VIII on "The Development of the Curriculum." In formulating a curriculum in accordance with the principles set forth most practical suggestions for the conduct of the recitation are given incidentally. These should prove most stimulating to the teacher. This chapter gives a critical survey of the culture-epoch theory and lays down certain demands: (1) that the curriculum material must be highly motivated; (2) that the curriculum must be in harmony with the special character of the time and the place; (3) that it must be in harmony with the teaching of psychology; (4) that it must be enriched by coördinating the educational opportunities of the environment; (5) that there must be unity and correlation of subject matter; (6) that the curriculum must be adaptable to the needs of each pupil; (7) that the curriculum must be made flexible to meet the varying degrees of ability."

A much-needed discussion is that found in Chapter IX on "Modes of Evolving Curricula." He asks this very pertinent question: "Shall we continue the old undemocratic practice that denied a place in the making of a curriculum to the only people who are professionally charged with its application in the classroom?"

Part III B, "Socializing the Child through Group Activities," gives us a constructive, thoroughly progressive treatment of school discipline. This chapter dealing with the rock on which so many teachers founder is one of the most valuable in the book. It is idealistic, progressive, and intensely practical. His discussion of order versus discipline will prove of great assistance to the young teacher.

This same sanity and moderation coupled with a thorough understanding of the objectives and significance of the movements characterize the discussions of the manual arts in education, vocational training, and vocational guidance. The argument for vocational education is summed up as follows: "The conclusion seems unescapable; the technique for modern industry can no longer be acquired by chance. Some agency must give youth the trade training that was assured by the guild system of old and by the apprenticeship system of more modern days. What better system than the public-school system charged with the duty of making men and women out of our boys and girls?" Dr. Klapper goes further than most advocates of vocational education, for he would include professional education in the program of supported vocational education. Under the "Administration of Vocational Education" he discusses the "school and social pathology, elimination, retardation, delinquency, part-time or coöperative schools, and the various kinds of trade schools with their specific problems."

The rest of the book deals with subjects that rest on a psychological base, the general subject being "Education as Mental Adjustment." I commend to every teacher the chapters on "Habit," "the Laws of Learning," "the Recitation Patterns," and especially his treatment of "The Transfer of Training and the Psychology of Deliberative Behavior."

The questions at the end of each chapter are remarkably well formulated. The bibliography for each subject is exhaustive. The presence for

these two features would indicate that the work is intended for a textbook. It will make a most teachable text for teacher-training classes, but it is much more than a textbook. It is an exposition of the best things in present-day education both those that are being realized and some that are as yet but dreams.

John L. Tildsley

Pupil Participation in High School Control, by RAYMOND G. DREWRY (Harcourt, Brace and Company).

To a surprisingly large number of people the word "government" connotes only disciplinary or police power. Even among teachers and school administrators who wish to afford their pupils training for citizenship, it has been the common practice to expose them to civic information and test them for interpretation and understanding, but rarely to give them the opportunity to experience through practice the knowledge and principles acquired in the classrooms.

Dr. Drewry's book throws valuable light upon the problem raised by this condition in the schools. He has collected information about pupil coöperation in school control from twelve schools of different sizes, and has had the resulting data evaluated by a representative group of experts in secondary education. The variation in numbers enrolled in the different schools, which runs from fifty in the smallest to more than two thousand in the largest, gives the reader a good sampling of the types of procedure now in operation.

The evaluation by the group of experts leads the author to certain conclusions of which we quote two:

"Intelligent, sympathetic, and continuous faculty guidance is needed for all student organizations existing within the school."

"The democratic principle underlying acceptable membership or leadership in a social organization is the capacity and disposition to render actual service."

The reader will be amply repaid by a study of Dr. Drewry's analysis. Much specific information is available for those who may be in the process of organizing or conducting student activities in connection with school government, and a sound philosophy is presented in the chapter on evaluation, from which we have just quoted.

A. D. W.

Children's Behavior and Teachers' Attitudes, by E. K. WICKMAN (The Commonwealth Fund).

To what extent are we teachers and parents responsible for the unacceptable behavior of the children in whose education we are playing such an important part? To what extent is the welfare of the child confused with the convenience of the adult

Dr. Wickman has supplied us with some extremely enlightening and stimulating data bearing on these and similar questions. The kinds of behavior that teachers considered most troublesome were compared with those that were looked on as the most serious problems by a group of mental hygienists. The differences revealed by the comparison are striking.

Lack of space forbids a detailed description of the contrast, but one or two examples will indicate its nature. Behavior characterized by impertinence and defiance was placed by the teachers almost at the top of the list of troublesome modes of conduct; the mental hygienists, on the contrary, placed it very near the bottom. Shyness, which was placed by the mental hygienists well up among the more serious adjustment problems, was listed by the teachers as the least troublesome of all. Between the rank-order arrangement of the mental hygienists and that of the teachers the correlation was negative.

It is the opinion of the author, unsupported, as he says, by evidence, that this striking difference between teachers' attitudes and the generally prevailing attitudes towards children's behavior is due to the stress laid on school accomplishment. This is a far-reaching conclusion, and the study that leads to it should be read with interest by every one who is concerned with the reorganization of schoolroom procedure.

A. D. W.

Characteristic Differences of Good and Poor Teachers, by A. S. BARR (Public School Publishing Company, pp. VII 127).

Dr. Barr has made a minutely analytical study of the schoolroom practices of two groups of teachers—one group distinctly superior, the other clearly inferior, on the basis of the collective opinions of several supervisors and of their records in service.

By means of carefully planned observations, a great deal of interesting data was collected, with the result that we have highly complete and accurate records of the precise activities of each teacher throughout several teaching periods. The attention of pupils, the exact amount of time spent in asking questions, listening to replies, making comments, giving assignments, and other activities were measured to an accuracy of one second. Through stenographic reports it was possible to collect long lists of the expressions used by the teachers in commenting on pupils' answers.

The conclusions drawn from the study are admittedly tentative. It has, however, directed attention towards certain clear differences between

practices of good and poor teachers, and it does ry definitely prepare the way for a kind of super- ision based on observation of a more objective ature than those too frequently used in the impressionistic" type of supervision. Perhaps vestigators who may follow this with further udies will find it possible to lay greater emphasis on the creative aspect of supervision without ing the significant values that attach to objec- ivity in observation.

A. D. W.

OTHERS SAY

The Inglis lecture for 1930, by Dr. Thomas H. riggs of Teachers College, is a direct challenge to e apologists for the academic high school. We ote from a report of this address published in the ew York *World* of January 10, 1930.

"States attorneys in most communities would be atified in presenting indictments against educa- onal authorities for malfeasance and misappropria- on of public funds."

"Education as an investment has failed to pay vidends. The taxpayer has been shamefully mposed upon by school officials and school boards hich fail to show results for huge expenditures of ublic money. After four years of work, high- chool graduates have neither culture nor prepara- on for life. Sticking close to the antiquated, raditional curriculum, educators wastefully at- empt to make academic scholars of all."

PRIVATE SCHOOLS HIT

Private schools, moreover, he charged, have shown hemselves an even greater failure, fostering an ndemocratic spirit and failing on the whole to show ny accomplishments in the field of experimental ducation as claimed. He urged their complete bolition by law.

"The authorities have made no serious efforts o formulate for secondary schools a curriculum hich promises maximum good to the supporting State," said Dr. Briggs.

"The social prestige resulting from the passing of courses that contain no vital interest and later manifest no material influence on action or character s mischievous and deceiving. It annually wastes millions of dollars of public money and precious time, and it deludes youth.

"There has, moreover, been no respectable achievement in the subjects offered, poorly chosen as they are. A seventy per cent achievement in mathematics is respectable in schools, in business it would soon lead to bankruptcy or the penitentiary."

"No State's attorney is likely to present such an indictment for malfeasance in office and misappro- priation of public funds. I am acquainted with none who knows enough about education to recog- nize these evils and act on them. We educators are probably safe from the penitentiary or ouster pro- ceedings. But this fact does not excuse us from the moral obligation to remedy the obvious and disas- trous effects in secondary education."

In succeeding numbers this page will contain reports of significant events, addresses, and articles of interest to secondary education. We shall be glad to receive contributions from people in the field.

F. E. Harshman

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